5th Annual NIH Conference on the

Science of Dissemination and Implementation: Research at the Crossroads

March 19-20, 2012

Bethesda North Marriott Hotel & Conference Center
5701 Marinelli Road | Bethesda, Maryland

Follow the conference on Twitter at #NIHDI12

5th Annual NIH Conference on the

Science of Dissemination and Implementation: Research at the Crossroads

March 19-20, 2012

Bethesda North Marriott Hotel & Conference Center
5701 Marinelli Road | Bethesda, Maryland

Acknowledgement

The *5th Annual NIH Conference on the Science of Dissemination and Implementation: Research at the Crossroads* is supported primarily by the NIH Office of Behavioral and Social Sciences Research and in part by the following:

National Cancer Institute (NCI)
National Center for Complementary and Alternative Medicine (NCCAM)
National Institute of Mental Health (NIMH)
Office of Disease Prevention (ODP)
The Veterans Health Administration (VHA), U.S. Department of Veterans Affairs (VA)

Additional contributions made by the following:

AcademyHealth
Administration for Children and Families (ACF)
Fogarty International Center (FIC)
National Human Genome Research Institute (NHGRI)
National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)

Reception sponsored by

KAISER PERMANENTE®

Kaiser Permanente

LEGACY | The Schroeder Institute FOR TOBACCO RESEARCH AND POLICY STUDIES

American Legacy

Table of Contents

Table of Contents

Agenda

AGENDA
Day 1: March 19, 2012

8:00 – 8:30 am	**Registration** (Grand Ballroom Foyer)
8:30 – 8:45 am	**Welcome** (Grand Ballroom, Salons A-D) Robert M. Kaplan, PhD Director, Office of Behavioral and Social Sciences Research, NIH **Opening Remarks** Francis S. Collins, MD, PhD Director, National Institutes of Health
8:45 – 9:45 am	**Opening Plenary** Sherry Glied, PhD Assistant Secretary for Planning and Evaluation U.S. Department of Health and Human Services
9:45 – 10:30 am	**Overview of Dissemination and Implementation Research Opportunities** David Chambers, DPhil National Institute of Mental Health, NIH Russell E. Glasgow, PhD National Cancer Institute, NIH
10:30 – 10:45 am	***Break and Transition to Concurrent Session 1***
10:45 am – 12:15 pm	**Concurrent Session 1** (see pages 23-25 for room assignments)
12:15 – 1:45 pm	**Lunch** (on your own) **Meet the Experts** • Gary G. Bennett, PhD, Duke University (Room: Brookside A) • Ross C. Brownson, PhD, Washington University in St. Louis (Room: Brookside B) • David Chambers, DPhil, National Institute of Mental Health, NIH (Room: White Flint Amphitheater) • Marshall H. Chin, MD, MPH, FACP, University of Chicago Medical Center (Room: Glen Echo) • Russell E. Glasgow, PhD, National Cancer Institute, NIH (Room: Forest Glen) • Matthew Kreuter, PhD, MPH, Washington University in St. Louis (Room: White Oak A) • Joseph McCannon, Centers for Medicare and Medicaid Services (Room: White Oak B) • Brian Mittman, PhD, Veterans Health Administration (Room: Grand Ballroom)
1:45 – 3:15 pm	**Concurrent Session 2** (see pages 26-28 for room assignments)
3:15 – 3:30 pm	***Break and Transition to Concurrent Session 3***
3:30 – 5:00 pm	**Concurrent Session 3** (see pages 29-31 for room assignments)
5:15 – 7:30 pm	**Poster Session** (Grand Ballroom, Salon E)

AGENDA
Day 2: March 20, 2012

7:00 – 8:00 am	*Breakfast meeting for TIDIRH 2011 Participants at hotel - White Flint Amphitheater (invitation only)*
8:30 – 9:30 am	**Strengthening eHealth Implementation Science: Bridging Bethesda and the Bay Area** (Grand Ballroom, Salons A-D) Gary G. Bennett, PhD Duke University
9:30 – 9:45 am	***Break and Transition to Concurrent Session 4***
9:45 – 11:15 am	**Concurrent Session 4** (see pages 32-35 for room assignments)
11:15 – 11:30 am	***Break and Transition to Closing Plenary***
11:30 am – 12:30 pm	**Integrative Discussion of Dissemination and Implementation Research: Taking Stock and Looking Forward** (Grand Ballroom, Salons A-D) Russell E. Glasgow, PhD (Moderator) National Cancer Institute, NIH Marshall H. Chin, MD, MPH, FACP University of Chicago Medical Center Lawrence W. Green, DrPH Department of Epidemiology and Biostatistics University of California, San Francisco Matthew Kreuter, PhD, MPH George Warren Brown School of Social Work Washington University in St. Louis Lisa Simpson, MB, BCh, MPH, FAAP President and CEO AcademyHealth
12:30 – 1:30 pm	**Lunch** (on your own)
1:30 – 4:30 pm	**Grant Writing Workshop** (White Flint Amphitheater) *Concept paper submission required for attendance*

Planning Committee and Plenary Speaker Lists

Planning Committee

Helen I. Meissner, PhD *(Co-Chair)*
Office of Behavioral and Social Sciences Research

Cynthia A. Vinson, MPA *(Co-Chair)*
National Cancer Institute

Russell E. Glasgow, PhD *(Co-Chair)*
National Cancer Institute

David Chambers, DPhil *(Co-Chair)*
National Institute of Mental Health

Melanie Bacon, PhD
National Institute of Allergy and Infectious Diseases

Jacinta Bronte-Tinkew, PhD
Center for Scientific Review

Redonna K. Chandler, PhD
National Institute on Drug Abuse

Amy Donahue, PhD
National Institute on Deafness and Other Communication Disorders

Denise Dougherty, PhD
Agency for Healthcare Research and Quality

Lori J. Ducharme, PhD
National Institute on Drug Abuse

Christopher M. Gordon, PhD
National Institute of Mental Health

Christine M. Hunter, PhD
National Institute of Diabetes and Digestive and Kidney Diseases

Kristen Huntley, PhD
National Center for Complementary and Alternative Medicine

Sarah Johnson, PhD
Office of Behavioral and Social Sciences Research

Cherry Lowman, PhD
National Institute on Alcohol Abuse and Alcoholism

Donna Jo McCloskey, PhD
National Institute of Nursing Research

Brian Mittman, PhD
Veterans Health Administration

Elizabeth L. Neilson
Office of Disease Prevention

Ruth Nowjack-Ramer, PhD
National Institute of Dental and Craniofacial Research

Barry Portnoy, PhD
Office of Disease Prevention

Irene Prabhu-Das, PhD
National Cancer Institute

Sonja M. Preston, MSW
Office of Behavioral and Social Sciences Research

Melissa Riddle, PhD
National Institute of Dental and Craniofacial Research

Catherine M. Stoney, PhD
National Heart, Lung, and Blood Institute

Marc Williams, MD, FAAP, FACMG
National Human Genome Research Institute

Linda Wright, MD
Eunice Kennedy Shriver National Institute of Child Health and Human Development

The Planning Committee would like to acknowledge and thank the following people for their assistance with proposal reviews:

Farah Bader, MPH
Fogarty International Center

Mark Bauer
Veterans Health Administration

Erica Breslau, PhD
National Cancer Institute

Ross Brownson, PhD
Washington University in St. Louis

Geoffrey Curran, PhD
University of Arkansas Medical Sciences

Laura Damshroder, MS, MPH
Veterans Health Administration

Terry Damush, PhD
Veterans Health Administration

Erin Eckstein, MSW
National Cancer Institute

Gerry Fairbrother, PhD
AcademyHealth

Alison Hamilton, PhD
Veterans Health Administration

Kathleen Handley, PhD
Fogarty International Center

Patricia Jones, DrPH, MPH
Centers for Disease Control and Prevention

Denise Juliano-Bult, MSW
National Institute of Mental Health

Lydia Kline, MPH, MS
Fogarty International Center

Madeline La Porta, MS
National Cancer Institute

Enid Light, PhD
National Institute of Mental Health

Sandra Mitchell, PhD, CRNP
National Cancer Institute

Wendy Nilsen, PhD
Office of Behavioral and Social Sciences Research

Wynn Norton, PhD
University of Alabama School of Public Health

Borsika Rabin, PhD, MPH, PharmD
Kaiser Permanente

Michael Sanchez, MPH, CHES
National Cancer Institute

Lucy Savitz, PhD, MBA
Intermountain Healthcare

Kurt Stange, MD, PhD
National Cancer Institute

Rachel Sturke, PhD, MPH
Fogarty International Center

Madeleine Wallace, PhD
Windrose Vision, LLC

Tisha Wiley, PhD
Office of Behavioral and Social Sciences Research

Katherine Wilson, PhD, MPH, CHES
Centers for Disease Control and Prevention

Plenary Speaker List

Gary G. Bennett, PhD
Associate Professor of Psychology and Neuroscience
and Global Health
Duke Global Health Institute
Box 90086
229 Soc Psy
Durham, NC 27708
Tel: 919-681-7760
gary.bennett@duke.edu

David Chambers, DPhil
Associate Director, Dissemination and
Implementation Research
Chief, Services Research and Clinical Epidemiology Branch
Chief, Dissemination and Implementation
Research Program
Division of Services and Intervention Research
National Institute of Mental Health
National Institutes of Health
6001 Executive Boulevard, Room 7164
Bethesda, MD 20892-9631
Tel: 301-443-2747
dchamber@mail.nih.gov

Marshall H. Chin, MD, MPH, FACP
Professor of Medicine
General Internal Medicine
University of Chicago Medical Center
5841 S. Maryland Avenue
Chicago, IL 60637
Tel: 773-702-0240
mchin@medicine.bsd.uchicago.edu

Francis S. Collins, MD, PhD
Director
National Institutes of Health
1 Center Drive
Bethesda, MD 20892
Tel: 301-496-2433
francis.collins@nih.gov

Russell E. Glasgow, PhD
Deputy Director
Dissemination and Implementation Science
Division of Cancer Control and Population Science
National Cancer Institute
National Institutes of Health
6130 Executive Boulevard, Room 6144
Bethesda, MD 20892
Tel: 301-435-4912
russ.glasgow@nih.gov

Sherry Glied, PhD
Assistant Secretary for Planning and Evaluation
U.S. Department of Health and Human Services
200 Independence Avenue, SW
Washington, DC 20201
Tel: 202-690-7858
sherry.glied@hhs.gov

Lawrence W. Green, DrPH
Adjunct Professor
Department of Epidemiology and Biostatistics
University of California, San Francisco
Box 0981, UCSF
San Francisco, CA 94143
Tel: 415-514-8115
lgreen@cc.ucsf.edu

Robert M. Kaplan, PhD
Director
Office of Behavioral and Social Sciences Research
Office of the Director
National Institutes of Health
31 Center Drive
Building 31, Room B1C19
Bethesda, MD 20892
Tel: 301-402-1146
robert.kaplan@nih.gov

Matthew Kreuter, PhD, MPH
Adjunct Professor of Behavioral Science and Health Education
George Warren Brown School of Social Work
Washington University in St. Louis
700 Rosedale Avenue
Campus Box 1009
St. Louis, MO 63112
Tel: 314-935-3733
mkreuter@wustl.edu

Lisa Simpson, MB, BCh, MPH, FAAP
President and CEO
AcademyHealth
1150 17th Street NW, Suite 600
Washington, DC 20036
Tel: 202-292-6727
lisa.simpson@academyhealth.org

Plenary Speaker Biographical Sketches

Plenary Speaker Biographical Sketches

GARY G. BENNETT, PhD

Gary G. Bennett, PhD is an Associate Professor of Psychology and Global Health at Duke University. He is affiliated with the Duke Cancer Institute, the Duke Center for Health Policy and Inequalities Research, and is Co-Director of the Duke Center on Biobehavioral and Social Aspects of Health Disparities. From 2003-2009, he served on the faculties of the Harvard School of Public Health and the Dana-Farber Cancer Institute. Dr. Bennett completed undergraduate studies at Morehouse College, doctoral training in clinical health psychology at Duke University, and the Alonzo Yerby postdoctoral fellowship in social epidemiology at the Harvard School of Public Health. Dr. Bennett's research program seeks to prevent and reduce obesity in high risk populations. In particular, his work leverages new media technologies to better manage obesity in the primary care setting. Dr. Bennett helped develop the interactive obesity treatment approach (iOTA) and his currently funded research trials include an 18-month iOTA-based obesity prevention trial using interactive voice response among community health center patients; a 24-month iOTA obesity treatment trial using web and IVR among community health center patients with hypertension, and; 6-month iOTA weight loss trials using text messaging among obese adults -- in North Carolina and Beijing. Dr. Bennett serves on the editorial boards for *Health Psychology* and *Annals of Behavioral Medicine* and is a member of the Board of Directors for the Society of Behavioral Medicine. Dr. Bennett is committed to the dissemination of evidence-based intervention approaches. He co-founded Crimson Health Solutions, a corporation that developed evidence-based behavior change interventions for the disease management sector; Health Dialog acquired Crimson in 2007. Dr. Bennett has published more than 65 scientific publications. His research is funded by the National Institutes of Health and the Robert Wood Johnson Foundation.

DAVID CHAMBERS, DPhil

David Chambers, DPhil, is Chief of the Services Research and Clinical Epidemiology Branch (SRCEB) of the Division of Services and Intervention Research at the National Institute of Mental Health. He arrived at NIMH in 2001, brought to the Institute to run the Dissemination and Implementation Research program within SRCEB, where he manages a portfolio of grants that study the integration of scientific findings and effective clinical practices in mental health within real-world practice settings.

Since 2006, David has also served as Associate Director for Dissemination and Implementation Research, leading NIH initiatives around the coordination of dissemination and implementation research in health, and has served as Institute representative to the Federal Action Agenda Executive Committee, which directs the Federal response to the President's Freedom Commission Report on Mental Health. Prior to his arrival at NIMH, David worked as a member of a research team at Oxford University, where he studied national efforts to implement evidence-based practices within healthcare settings.

MARSHALL H. CHIN, MD, MPH, FACP

Marshall H. Chin, MD, MPH, FACP, Professor of Medicine at the University of Chicago, is a general internist with extensive experience improving the care of vulnerable patients with chronic disease. He is Director of the RWJF Finding Answers: Disparities Research for Change National Program Office; Director of the Chicago Center for Diabetes Translation Research; Associate Chief and Director of Research in the Section of General Internal Medicine; Co-Director of the John A. Hartford Foundation Center of Excellence in Geriatrics at the University of Chicago. He was a member of the Institute of Medicine Committee on Future Directions for the National Healthcare Quality and Disparities Reports. He currently is a member of the National Quality Forum Measure Applications Partnership Clinician Workgroup and the NQF Healthcare Disparities and Cultural Competency Consensus Standards Steering Committee. Dr. Chin is leading the evaluation of a Commonwealth Fund project that is implementing the patient-centered medical home in 65 safety net clinics across five states. He is also improving diabetes care and outcomes on the South Side of Chicago through health care system and community interventions. He serves on the editorial board of *Health Services Research* and the RWJF Aligning Forces for Quality National Advisory Committee.

FRANCIS S. COLLINS, MD, PhD

Francis S. Collins, MD, PhD is the Director of the National Institutes of Health (NIH). In that role he oversees the work of the largest supporter of biomedical research in the world, spanning the spectrum from basic to clinical research.

Dr. Collins is a physician-geneticist noted for his landmark discoveries of disease genes and his leadership of the international Human Genome Project, which culminated in April 2003 with the completion of a finished sequence of the human DNA instruction book. He served as director of the National Human Genome Research Institute at the NIH from 1993-2008.

Before coming to the NIH, Dr. Collins was a Howard Hughes Medical Institute investigator at the University of Michigan. He is an elected member of the Institute of Medicine and the National Academy of Sciences, was awarded the Presidential Medal of Freedom in November 2007, and received the National Medal of Science in 2009.

RUSSELL E. GLASGOW, PhD

Dr. Russell Glasgow is Deputy Director, Implementation Science, in the Division of Cancer Control and Population Sciences at the National Cancer Institute (NCI). He is responsible for guiding some of NCI's flagship research dissemination tools such as Cancer Control P.L.A.N.E.T., the *Cancer Trends Progress Report*, and State Cancer Profiles.

Dr. Glasgow earned his PhD and MS degrees in Clinical Psychology from the University of Oregon, Eugene. He is a behavioral scientist specializing in the design and evaluation of practical and generalizable behavior change interventions, especially using interactive technologies, for use in health care, worksite, and community settings. He has published over 400 articles and been the recipient of key awards in his field, including the Society of Behavioral Medicine's Distinguished Scientist Award. Most recently, Dr. Glasgow was a senior scientist with Kaiser Permanente, Institute for Health Research before joining NCI.

SHERRY GLIED, PhD

Glied's principal areas of research are in health policy reform and mental health care policy. Her book on health care reform, *Chronic Condition*, was published by Harvard University Press in January 1998. Her latest book, with Richard Frank, is *Better But Not Well: Mental Health Policy in the U.S. since 1950*, which was published by The Johns Hopkins University Press in 2006. Glied holds a BA in economics from Yale University, an MA in economics from the University of Toronto, and a PhD in economics from Harvard University.

Sherry Glied was sworn-in as the Assistant Secretary for Planning and Evaluation at the U.S. Department of Health and Human Services on July 1, 2010. Previously, Glied was department chair and professor in the Department of Health Policy and Management of Columbia University's Mailman School of Public Health. In 1992–1993, she served as a senior economist for health care and labor market policy on the President's Council of Economic Advisers under Presidents Bush and Clinton, and participated in the Clinton Health Care Task Force. She has been elected to the Institute of Medicine of the National Academy of Sciences and to the Board of AcademyHealth. She was a member of the Congressional Budget Office's Panel of Health Advisers.

LAWRENCE W. GREEN, DrPH, DSC (HON)

Before joining the University of California, San Francisco in 2004, he was Director of the Office of Science and Extramural Research and Director of the World Health Organization Global Tobacco Control Collaborating Center for the Centers for Disease Control. He has been on the full-time public health and/or medical faculties at Berkeley, Johns Hopkins, Harvard, Texas, and the University of British Columbia. He was the first Director of the federal Office of Health Promotion under the Carter Administration, and a Vice President of the Henry J. Kaiser Family Foundation. He has published several books and over 300 articles on program planning, evidence and evaluation issues in health services and public health. He served on the founding U.S. Preventive Services Task Force and now on the Task Force on Community Preventive Services, as Associate Editor of the *Annual Reviews of Public Health*, and on the Editorial Boards of 13 other journals. His awards include the highest distinctions of the American Public Health Association, the American Academy of Health Behavior, the American Association for the Advancement of Health Education, the Society for Public Health Education, the UC Berkeley School of Public Health Alumnus of the Year, and an Honorary Doctor of Science degree from the University of Waterloo. He was elected in 2009 to the Institute of Medicine of the National Academies.

ROBERT M. KAPLAN, PhD

Robert M. Kaplan, PhD joined NIH as the Director of the Office of Behavioral and Social Sciences Research and NIH Associate Director for Behavioral and Social Sciences Research in February 2011.

Kaplan comes to NIH from the University of California, Los Angeles, where he was distinguished professor in the department of health services at the School of Public Health and the department of medicine at the David Geffen School of Medicine. He has also served as principal investigator of the UCLA/RAND CDC Prevention Research Center and director of the UCLA/RAND Health Services Research training program. Prior to his UCLA appointment, Kaplan was professor and chair of the department of family and preventive medicine at the University of California, San Diego School of Medicine.

Kaplan earned an MA and PhD in psychology at the University of California, Riverside. His research interests include behavioral medicine, health services research, health outcome measurement and multivariate data analysis. In December of 2010, he completed his term as editor-in-chief of the journal *Health Psychology*.

He received the American Psychological Association Division of Health Psychology's Annual Award for Outstanding Scientific Contribution as a junior scholar in 1987 and as a senior scholar in 2001. He also received the Society of Behavioral Medicine's National Leadership Award in 2004 and Distinguished Research Mentor Award in 2006. He is a member of the Institute of Medicine of the National Academy of Sciences.

MATTHEW W. KREUTER, PhD, MPH

Matthew W. Kreuter, PhD, MPH is professor at Washington University's Brown School, and Director of the Health Communication Research Laboratory, one of five NCI-designated Centers of Excellence in Cancer Communication Research. His research explores the strategies to increase the reach and effectiveness of health information in disadvantaged minority populations to help eliminate health disparities.

LISA SIMPSON, MB, BCh, MPH, FAAP

Dr. Simpson is the president and CEO of AcademyHealth, and its advocacy arm, the Coalition for Health Services Research. A nationally recognized health policy researcher and pediatrician, Dr. Simpson is a passionate advocate for the translation of research into policy and practice.

Before joining AcademyHealth, a membership organization whose programs support health services research and researchers, and translate that work into action through dissemination, technical assistance, and policy analysis, Dr. Simpson was director of the Child Policy Research Center at Cincinnati Children's Hospital Medical Center and professor of pediatrics in the Division of Health Policy and Clinical Effectiveness, Department of Pediatrics, University of Cincinnati. She served as the Deputy Director of the Agency for Healthcare Research and Quality from 1996-2002. She previously served on the Institute of Medicine's Committee on Comparative Effectiveness Research Priorities and the Committee on Highly Effective Clinical Services, as a National Policy Advisor for the National Initiative for Children's Healthcare Quality, on a national advisory committee to the Agency for Healthcare Research and Quality recommending a core quality measure set for use by state Medicaid and CHIP programs, and on the board of directors for the Academic Pediatric Association.

Dr. Simpson is a member of the American Academy of Pediatrics Obesity Leadership Workgroup, the Robert Wood Johnson Clinical Scholars Program National Advisory Council, and the AHRQ HCUP Steering Committee.

Dr. Simpson's research focuses on improving the performance of the health care system and includes studies of the quality and safety of care, the role of health information technology in improving the quality of care, health and health care disparities and the health policy and system response to childhood obesity. She is the recipient of numerous awards, including the Excellence in Public Service Award from the American Academy of Pediatrics, the Senior Executive Service Meritorious Presidential Rank Award, the Department of Health and Human Services Secretary's Distinguished Service Award, the 2007 Health Policy Researcher of the Year award from the Health Policy Institute of Ohio, and most recently the 2010 Public Policy and Advocacy award from the Academic Pediatrics Association.

Dr. Simpson earned her undergraduate and medical degrees at Trinity College (Dublin, Ireland), a master's in public health at the University of Hawaii, and completed a post-doctoral fellowship in health services research and health policy at the University of California, San Francisco.

Plenary Session Abstracts

Plenary Session Abstracts

March 20, 2012
8:30 - 9:30 a.m.

Strengthening eHealth Implementation Science: Bridging Bethesda and the Bay Area

Gary G. Bennett (Duke University)

eHealth interventions have demonstrated efficacy across a wide range of conditions, populations, and settings. Nevertheless, there has been limited translation of evidence-based eHealth approaches into real-world settings. Although this frequently arouses frustration in the research community, the problem is bi-directional. eHealth research has yet to widely integrate market considerations, as well as industry products, strategies, and platforms. In this talk, Dr. Bennett will argue that eHealth implementation science can strengthen its impact by better understanding its position in a crowded and rapidly changing marketplace, understanding its value proposition, and more frequently building relationships with other industry players. To do this Dr. Bennett will first identify several major barriers that limit the impact of eHealth implementation science. Next, Dr. Bennett will argue why addressing these barriers requires broad-based industry partnerships. Finally, using case examples, Dr. Bennett will offer practical strategies for developing academic-industry partnerships that can strengthen the impact of eHealth implementation science.

March 20, 2012
11:30 a.m. - 12:30 p.m.

Integrative Discussion of Dissemination and Implementation Research: Taking Stock and Looking Forward

Panelists: *Marshall Chin (University of Chicago), Lawrence W. Green (University of California, San Francisco), Matthew Kreuter (Washington University in St. Louis), Lisa Simpson (AcademyHealth),*

Moderator: *Russell Glasgow (National Cancer Institute)*

This panel is designed to be thoughtful, provocative and promote audience engagement. It will feature outstanding researchers and thought leaders in D and I having a conversation with each other and the audience around dissemination and implementation research at the crossroads. Three leaders in the field: Matthew Kreuter (health IT, public health and linkage to low income populations); Lisa Simpson (health services research); and Marshall Chin (reducing health disparities) will each provide concise answers to the following questions (2-3 minutes per question/ panelist).

1. What do you consider the single most important advance thus far in D and I research?
2. What is the most exciting thing you heard at this meeting?
3. What do you see as the single most important challenge for the D and I research field today?
4. What is the most important opportunity in which you would encourage D and I researchers should become involved?

The remainder of the session will be devoted to interaction with the audience and each other around emergent issues.

Concurrent Session List

Concurrent Session 1
March 19, 2012
10:45 a.m. – 12:15 p.m.

1A. IMPLEMENTATION OF SUBSTANCE ABUSE INTERVENTIONS

Room: Glen Echo

Session: Individual Oral Presentations

Chair: Kristen Huntley, PhD, National Center for Complementary and Alternative Medicine

IDENTIFYING VARIATIONS TO SUPPORT NATIONAL IMPLEMENTATION OF BEHAVIORAL COUPLES THERAPY IN VHA SUBSTANCE USE DISORDER TREATMENT PROGRAMS

Presenter: Elizabeth Gifford, PhD, Center for Health Care Evaluation

A LARGE-SCALE RANDOMIZED TRIAL OF THE GETTING TO OUTCOMES IMPLEMENTATION SUPPORT INTERVENTION

Presenter: Matthew Chinman, PhD, RAND Corporation

REVENUE STREAMS ASSOCIATED WITH THE IMPLEMENTATION OF MEDICATION-ASSISTED TREATMENT FOR OPIOID DEPENDENCE

Presenter: Hannah Knudsen, PhD, University of Kentucky

1B. D&I METHODS: FROM ETHNOGRAPHY TO SIMULATION MODELING

Room: White Oak A

Session: Individual Oral Presentations

Chair: Brian Mittman, PhD, Veterans Health Administration

USING LOCAL DATA TO FORECAST LIVES SAVED FROM HIV TREATMENT EXPANSION IN HAITI

Presenter: April Kimmel, PhD, VCU School of Medicine

DOES MARKETING ENHANCE DISSEMINATION? RESULTS FROM A SYSTEM DYNAMICS SIMULATION STUDY

Presenter: Matthew Kreuter, PhD, Washington University in St. Louis

AN ETHNOGRAPHIC APPROACH TO STUDYING TECHNOLOGY USE: EVALUATING THE IMPLEMENTATION OF PATIENT-FACING KIOSKS AT FOUR CALIFORNIA EMERGENCY DEPARTMENTS

Presenter: Sara Ackerman, PhD, MPH, University of California, San Francisco

1C. DIET, WEIGHT AND PHYSICAL ACTIVITY

Room: White Flint Amphitheater
Session: Individual Oral Presentations
Chair: Madeline La Porta, National Cancer Institute

"FIRST MOVER" INNOVATION IMPLEMENTATION AND THE CONCEPT OF COMPATIBILITY
Presenter: James W. Dearing, PhD, Kaiser Permanente

LESSONS LEARNED FROM A STATEWIDE DISSEMINATION AND IMPLEMENTATION OF BODY & SOUL
Presenter: Linda Fleisher, PhD, MPH, Fox Chase Cancer Center

IMPLEMENTATION OF EVIDENCE-BASED SERVICES FOR WEIGHT AT SPECIALTY MENTAL HEALTH CLINICS
Presenter: Amy N. Cohen, PhD, Greater Los Angeles VA

1D. INNOVATIVE METHODS TO STUDY D&I

Room: White Oak B
Session: Individual Oral Presentations
Chair: Irene Prabhu Das, PhD, National Cancer Institute

ASSESSING ORGANIZATIONAL READINESS FOR CHANGE IN IMPLEMENTATION RESEARCH; RESULTS FROM IMPLEMENTATION OF TEAM BASED CARE FOR PERINATAL DEPRESSION
Presenter: Ian M. Bennett, MD, PhD, University of Pennsylvania

NETWORK CENTRALIZATION AND PREDICTING DISSEMINATION OF EVIDENCE-BASED GUIDELINES IN EIGHT STATE TOBACCO CONTROL NETWORKS
Presenter: Bobbi J. Carothers, PhD, Center for Tobacco Policy Research - Washington University in St. Louis

PARTICIPATORY METHODS PROVIDING INFORMATION ON EVIDENCE-BASED PRACTICES AND WHERE TO FIND PRACTICAL ADVICE ON HOW TO IMPLEMENT THEM
Presenter: Gregg Moor, BA, InSource Research Group

1E. TRANSLATION RESEARCH IN A DENTAL SETTING

Room: Forest Glen

Session: Panel

Chair: Jan Clarkson, PhD, BDS, BSc, FDS, RCSEd, University of Dundee

Discussant: Jeremy Grimshaw, MBChB, PhD, FRCGP, University of Ottawa

Panelists: Jan Clarkson, PhD, BDS, BSc, FDS, RCSEd, University of Dundee
Craig Ramsay, PhD, MSc, University of Aberdeen
Linda Young, PhD, MA, NHS, Education for Scotland
Douglas Stirling, PhD, Education for Scotland

1F. IMPLEMENTATION PROCESS & OUTCOME MEASURES: EVIDENCE USE & CULTURAL EXCHANGE; IMPLEMENTATION CLIMATE & LEADERSHIP; STAGES OF IMPLEMENTATION COMPLETION

Room: Grand Ballroom (Salons A-D)

Session: Panel

Chair: Gregory A. Aarons, PhD, University of California, San Diego

Discussant: Enola Proctor, PhD, Washington University St. Louis

Panelists: Lawrence Palinkas, PhD, University of Southern California and Child and Adolescent Services
Gregory A. Aarons, PhD, University of California, San Diego
Lisa Saldana, PhD, Center for Research to Practice

1G. IMPLEMENTATION OF GENOMIC MEDICINE

Room: Brookside A

Session: Panel

Chair: Marc S. Williams, MD, Genomic Medicine Institute, Geisinger Clinic

Panelists: Marc S. Williams, MD, Genomic Medicine Institute, Geisinger Clinic
Lori A. Orlando, MD, MHS, Institute for Genomic Sciences & Policy
David Mrazek, MD, Mayo Clinic

1H. DIABETES DISSEMINATION AND IMPLEMENTATION RESEARCH

Room: Brookside B

Session: Panel

Chair: Christine Hunter, PhD, ABPP, National Institute of Diabetes & Digestive & Kidney Diseases, NIH

Panelists: Jeffrey A. Katula, PhD, MA, Wake Forest School of Medicine
Andrea Kriska, PhD, MS, University of Pittsburgh
Russell Rothman, MD, MPP, Vanderbilt University Medical Center

Concurrent Session 2
March 19, 2012
1:45 – 3:15 p.m.

2A. IMPLEMENTATION IN THE COMMUNITY CONTEXT

Room: White Oak A

Session: Individual Oral Presentations

Chair: Tisha Wiley, PhD, National Institute on Drug Abuse

COMPARISON OF ONLINE AND FACE-TO-FACE TRAINING IN THE CRITICAL TIME INTERVENTION MODEL
Presenter: Suzanne Zerger, PhD, Center for Social Innovation

IMPLEMENTATION OF A COLORECTAL CANCER SCREENING PROGRAM AT A COMMUNITY HEALTH CENTER: CREATING MOMENTUM FOR POSITIVE CHANGE
Presenter: Mei-Po Yip, PhD, University of Washington

A LATENT PROFILE ANALYSIS OF THE IMPLEMENTATION OF EVIDENCE-BASED PRACTICES IN COMMUNITY SUBSTANCE ABUSE TREATMENT SETTINGS
Presenter: Junqing Liu, PhD, MSW, MSS, University of Maryland at Baltimore

2B. INFORMING QUALITY IMPROVEMENT

Room: Glen Echo

Session: Individual Oral Presentations

Chair: Christopher Gordon, PhD, National Institute of Mental Health

IMPROVING PATIENT DECISION-MAKING AND ACCESS TO KIDNEY TRANSPLANT: A REGIONAL EXPLORE TRANSPLANT DISSEMINATION & IMPLEMENTATION PROJECT
Presenter: Amy D. Waterman, PhD, Washington University School of Medicine

IMPLEMENTATION IN RETAIL PHARMACIES: LESSONS FROM A STUDY OF FACTORS INFLUENCING IMPLEMENTATION OF AHRQ'S HEALTH LITERACY PHARMACY TOOLS
Presenter: Sarah J. Shoemaker, PharmD, PhD, Abt Associates, Inc.

IMPACT OF FOUR TYPES OF STATE INCENTIVES ON MEDICAID MENTAL HEALTH CLINIC DECISION TO PARTICIPATE IN A LARGE STATE CQI INITIATIVE
Presenter: Molly Finnerty, MD, EBSIS/NYSOMH/NYSPI, Columbia College of Physicians and Surgeons

2C. IMPROVING DIABETES CARE

Room: Forest Glen

Session: Individual Oral Presentations

Chair: Christine Hunter, PhD, National Institute of Diabetes and Digestive and Kidney Diseases

IMPLEMENTATION AS BEHAVIOR: USING ORGANIZATIONAL AND INDIVIDUAL THEORIES OF BEHAVIOR TO PREDICT EVIDENCE-BASED DIABETES CARE IN THE UNITED KINGDOM

Presenter: Justin Presseau, PhD, Newcastle University (UK)

EVALUATION OF THE DVD AS A NOVEL APPROACH TO DELIVERY OF LIFESTYLE INTERVENTION FOR DIABETES PREVENTION

Presenter: M. Kaye Kramer, RN, MPH, DrPH, CCRC, University of Pittsburgh

IMPLEMENTATION OF A PRIVATE INTEGRATED CARE SETTING'S SUCCESSFUL DIABETES QI INITIATIVE IN SAFETY NET CLINICS: A PRACTICE-BASED RANDOMIZED TRIAL

Presenter: Rachel Gold, PhD, MPH, Kaiser Permanente Center for Health Research

2D. GLOBAL HEALTH

Room: White Flint Amphitheater

Session: Individual Oral Presentations

Chair: Kathleen Handley, PhD, Fogarty International Center

ASSESSING PROGRAM SUSTAINABILITY OF TWO COMMUNITY-BASED CHILD NUTRITION INTERVENTION PROGRAMS IN THE PERUVIAN RURAL HIGHLANDS

Presenter: Sunny S. Kim, BA, MPH, Cornell University

DELIVERING SUSTAINABLE GLOBAL HEALTH INNOVATIONS AT SCALE: ESTIMATING DIFFUSION SYSTEM CAPACITY

Presenter: Lauren Kendall Krause, MD, MPH, Kaiser Permanente Institute for Health Research

USING NETWORK-MAPPING TO EXAMINE INFORMATION DISSEMINATION AND IMPLEMENTATION WITHIN ETHIOPIA'S FAMILY PLANNING AND REPRODUCTIVE HEALTH SYSTEM

Presenter: Sarah V. Harlan, MPH, Johns Hopkins Center for Communication Programs (JHU, CCP)

2E. CAN EMR-BASED CLINICAL DECISION SUPPORT IMPROVE CARE AND REDUCE HEALTH CARE COSTS? RESULTS FROM A GROUP RANDOMIZED TRIAL

Room: Brookside A

Session: Panel

Chair: Patrick J. O'Connor, MD, MPH, HealthPartners Research Foundation

Panelists: Patrick J. O'Connor, MD, MPH, HealthPartners Research Foundation
JoAnn Sperl-Hillen, MD, HealthPartners Research Foundation
William A. Rush, PhD, HealthPartners Research Foundation

2F. SHOW ME, DON'T TELL ME: THE USE OF BEHAVIORAL REHEARSAL AND STANDARDIZED PATIENT METHODS TO ENHANCE IMPLEMENTER SKILLS

Room: Brookside B

Session: Panel

Chair: Wendi Cross, PhD, University of Rochester Medical Center

Panelists: Rinad Beidas, PhD, University of Pennsylvania
Shannon Dorsey, PhD, University of Washington
Wendi Cross, PhD, University of Rochester Medical Center

2G. SYSTEMS SCIENCE METHODOLOGIES: INVOLVING STAKEHOLDERS TO ENHANCE DISSEMINATION AND IMPLEMENTATION RESEARCH

Room: Grand Ballroom (Salons A-D)

Session: Panel

Chair: Helen I. Meissner, PhD, Office of Behavioral and Social Sciences Research, NIH

Panelists: Kristen Hassmiller Lich, PhD, University of North Carolina Chapel Hill
Patricia L. Mabry, PhD, Office of Behavioral and Social Sciences Research, NIH
Jessica Burke, PhD, Richard Garland, MSW, University of Pittsburgh
Jennifer Watling Neal, PhD, Michigan State University

2H. BIRDS EYE VIEW: CHOICES AND CHALLENGES AROUND IMPLEMENTATION SCIENCE IN NATIONAL EVALUATIONS

Room: White Oak B

Session: Panel

Co-chairs: Lauren Supplee, PhD, Administration for Children and Families, HHS
Molly Irwin, PhD, MPH, Administration for Children and Families, HHS

Panelists: Virginia Knox, PhD, MDRC
Chrishana M. Lloyd, PhD, MDRC
Alan Werner, PhD, Abt Associates

Concurrent Session 3
March 19, 2012
3:30 – 5:00 p.m.

3A. ASSESSING ORGANIZATIONAL CHANGE

Room: White Flint Amphitheater

Session: Individual Oral Presentations

Chair: Cherry Lowman, PhD, National Institute of Alcohol Abuse and Alcoholism

IMPLEMENTATION OF NEW CLINICAL SERVICES: PARADIGM SHIFTS AND PRACTICAL ADJUSTMENTS
Presenter: Matthew Chinman, PhD, VA Pittsburgh & RAND

USING ORGANIZATIONAL READINESS DATA TO TAILOR IMPLEMENTATION STRATEGIES TO LOCAL CONTEXTS
Presenter: Alison Hamilton, PhD, MPH, VA Greater Los Angeles & UCLA

USING TWO DISTINCT INTRA-CLASS CORRELATION COEFFICIENTS TO ASSESS INTER-RATER RELIABILITY AND AGREEMENT: IMPLICATIONS FOR ORGANIZATIONAL MEASURES
Presenter: Christian D. Helfrich, PhD, Northwest HSR&D Center of Excellence, VA Puget Sound Healthcare System

3B. MEASURING READINESS, COST AND CAPABILITY FOR IMPLEMENTATION

Room: Glen Echo

Session: Individual Oral Presentations

Chair: Elizabeth Neilson, MSN, MPH, Office of Disease Prevention

IMPLEMENTING EVIDENCE-BASED INTERVENTIONS IN LOW-WAGE WORKPLACES: MEASURING EMPLOYERS' READINESS AND CAPACITY
Presenter: Peggy A. Hannon, PhD, MPH, University of Washington

COST OF IMPLEMENTING NEW STRATEGIES (COINS)
Presenter: Lisa Saldana, PhD, Center for Research to Practice and Oregon Social Learning Center

PRACTICE TRANSFORMATION IN PRIMARY CARE: THE IMPACT OF PRACTICE FACILITATION AND LOCAL LEARNING COLLABORATIVES ON CHANGE PRIORITY, CAPABILITY, AND CONTENT
Presenter: Margot R. Krauss, MD, Westat

3C. CHILD HEALTH

Room: Forest Glen
Session: Individual Oral Presentations
Chair: Peyton Purcell, MPH, National Cancer Institute

THE ELUSIVE RELATIONSHIP BETWEEN IMPLEMENTER FIDELITY AND CLINICAL OUTCOMES: METHODS AND MEASUREMENT
Presenter: Wendi Cross, PhD, University of Rochester Medical Center

IMPLEMENTING INTERVENTIONS TO IMPROVE RESPIRATORY HEALTH IN HEAD START PROGRAMS
Presenter: Michelle N. Eakin, PhD, Johns Hopkins School of Medicine

VALIDITY OF A SELF-ASSESSMENT TOOL TO MEASURE PHYSICAL ACTIVITY & WATER IN SCHOOL-AGE PROGRAMS
Presenter: Rebekka M. Lee, ScM, Harvard School of Public Health

3D. THE CROSSROADS OF RESEARCH AND POLICY

Room: White Oak A
Session: Individual Oral Presentations
Chair: Catherine Stoney, PhD, National Heart, Lung and Blood Institute

TRANSLATION AT THE CROSSROADS OF RESEARCH AND POLICY: WHERE DO POLICYMAKERS SEEK EVIDENCE AND WHAT ARE THEY LOOKING FOR?
Presenter: Elizabeth Dodson, PhD, MPH, Washington University in St. Louis

PUSHING USEFUL SCIENCE TO HEALTH SYSTEM MANAGERS AND POLICYMAKERS
Presenter: Moriah Ellen, MBA, PhD, McMaster University

AT THE CROSSROADS OF RESEARCH & PRACTICE: A STATE AGENCY–UNIVERSITY PARTNERSHIP FOR TRANSLATIONAL RESEARCH AND DISSEMINATION OF EBPs
Presenter: Brian K. Bumbarger, MEd, Prevention Research Center, Penn State University

3E. SUSTAINABILITY RESEARCH

Room: White Oak B

Session: Individual Oral Presentations

Chair: Barry Portnoy, PhD, Office of Disease Prevention

SUSTAINABILITY OF EVIDENCE-BASED HEALTHCARE: RESEARCH AGENDA AND METHODS
Presenter: Enola Proctor, PhD, Washington University in St. Louis

SUSTAINABILITY RESEARCH: WHAT ARE THE MEASURABLE OUTCOMES?
Presenter: Mary Ann Scheirer, PhD, Scheirer Consulting

WALKING THE WALK: PLANNING FOR INTERVENTION SUSTAINABILITY
Presenter: L. Ebony Boulware MD, MPH, Johns Hopkins University School of Medicine

3F. IMPLEMENTATION OF EVIDENCE-BASED PRACTICE IN CHILD WELFARE: HOW DO WE ENGAGE, TRAIN, AND RETAIN STAKEHOLDERS?

Room: Brookside A

Session: Panel

Chair: Shannon Self-Brown, PhD, Georgia State University

Discussant: Daniel Whitaker, PhD, Georgia State University

Panelists: Shannon Self-Brown, PhD, Georgia State University
Patti Chamberlain, PhD, Center for Research to Practice and Oregon Social Learning Center
Shannon Dorsey, PhD, University of Washington

3G. INNOVATIVE SOCIAL NETWORK ANALYSIS IN DISSEMINATION AND IMPLEMENTATION RESEARCH

Room: Grand Ballroom (Salons A-D)

Session: Panel

Chair: C. Hendricks Brown, PhD, University of Miami

Panelists: Thomas W. Valente, PhD, University of Southern California
Lawrence A. Palinkas, PhD, University of Southern California
C. Hendricks Brown, PhD, University of Miami

3H. STRENGTHENING CAPACITY FOR IMPLEMENTATION RESEARCH IN DEVELOPING COUNTRIES

Room: Brookside B

Session: Panel

Chair/Discussant: Jason B. Smith, PhD, MPH, University of North Carolina at Chapel Hill

Panelists: Nhan Tran, PhD, World Health Organization
Kathleen Handley, PhD, Technical Advisor, NIH/FIC
Margaret Gyapong, MD, Ghana Health Service

Concurrent Session 4
March 20, 2012
9:45 – 11:15 a.m.

4A. DESIGNING FOR DISSEMINATION

Room: Glen Echo

Session: Individual Oral Presentations

Chair: Michael Sanchez, MPH, CHES, National Cancer Institute

A DISTRIBUTION SYSTEM TO DISSEMINATE CHRONIC DISEASE PREVENTION TO SMALLER WORKPLACES
Presenter: Jeff Harris, MD, MPH, MBA, University of Washington

IDENTIFYING FACTORS LIKELY TO INFLUENCE COMPLIANCE WITH DIAGNOSTIC IMAGING GUIDELINE RECOMMENDATIONS FOR SPINE DISORDERS AMONG CHIROPRACTORS IN NORTH AMERICA: A FOCUS GROUP STUDY USING THE THEORETICAL DOMAINS FRAMEWORK
Presenter: André E Bussières, DC, MSc, PhD (Candidate), University of Ottawa, Canada

IMPROVING TRANSITIONS IN CARE FROM THE HOSPITAL TO HOME FOR COGNITIVELY IMPAIRED ADULTS AND THEIR FAMILY CAREGIVERS
Presenter: Mary D. Naylor, PhD, RN, University of Pennsylvania School of Nursing

4B. COMMUNITY-BASED APPROACHES TO REDUCING HEALTH DISPARITIES

Room: White Flint Amphitheater

Session: Individual Oral Presentations

Chair: Donna McCloskey, RN, PhD, National Institute of Nursing Research

PRIORITY-SETTING TO SUPPORT EVIDENCE-BASED PROGRAMMING IN COMMUNITY SETTINGS: CURRENT PRACTICES AND OPPORTUNITIES
Presenter: Shoba Ramanadhan, ScD, MPH, Dana-Farber Cancer Institute

USING EVALUATION DATA TO IMPROVE THE IMPLEMENTATION OF NHLBI'S COMMUNITY HEALTH WORKER PROGRAMS
Presenter: Jovonni Spinner, MPH, CHES; NHLBI/DARD

DISSEMINATION OF COLORECTAL CANCER SCREENING THROUGH COMMUNITY ORGANIZATIONS: TIMING AND FIDELITY OF PROGRAM IMPLEMENTATION
Presenter: Annette E. Maxwell, DrPH, University of California, Los Angeles

4C. SCALE-UP AND LARGE SCALE D&I

Room: Forest Glen

Session: Individual Oral Presentations

Chair: Erin Eckstein, MSW, National Cancer Institute

OUTPATIENT QUALITY IMPROVEMENT NETWORK (OQUIN): FOCUS ON CARDIOVASCULAR DISEASE (CVD) PREVENTION

Presenter: Brent Egan, MD, Medical University of South Carolina

RESEARCH TRAINING AND CAPACITY BUILDING NETWORKS AS A WAY TO ENHANCE THE DEVELOPMENT AND UPTAKE OF AN EVIDENCE BASE FOR THE PREVENTION AND CONTROL OF NCDS

Presenter: Brian Oldenburg, PhD, Monash University, Australia

IMPLEMENTATION OF TF-CBT IN TANZANIA: TASK-SHIFTING MENTAL HEALTH CARE FOR ORPHANED YOUTH

Presenter: Shannon Dorsey, PhD, University of Washington

4D. TECHNOLOGY IN MENTAL HEALTH

Room: Brookside A

Session: Individual Oral Presentations

Chair: Ken Weingardt, PhD, Veterans Health Administration

DEVELOPING AND PILOTING A WEB-BASED, LONG-DISTANCE IMPLEMENTATION STRATEGY FOR DEPRESSION CARE IN HOME HEALTHCARE PATIENTS

Presenter: Martha L. Bruce, PhD, MPH, Weill Cornell Medical College

EVALUATION OF AN INTERNET VERSION OF MINDFULNESS BASED COGNITIVE THERAPY FOR IMPLEMENTATION IN AN HMO

Presenter: Arne Beck, PhD, Institute for Health Research, Kaiser Permanente Colorado

IMPLEMENTING EVIDENCE-BASED QUALITY IMPROVEMENT AND PATIENT KIOSKS IN SPECIALTY MENTAL HEALTH: IMPROVING EMPLOYMENT SERVICES AND OUTCOMES

Presenter: Alexander S. Young, MD, MSHS, Greater Los Angeles VA and UCLA

4E. UNDERSTANDING UPTAKE OF EVIDENCE IN CLINICAL PRACTICE

Room: White Oak A

Session: Individual Oral Presentations

Chair: Melissa Riddle, PhD, National Institute of Dental and Craniofacial Research

UNDERSTANDING AUDIT AND FEEDBACK: APPLYING COGNITIVE THEORIES AND CONSTRUCTS TO ADDRESS THE 'INTENTION-BEHAVIOUR GAP'

Presenter: Heather Colquhoun, PhD, RegOT(Ont), Ottawa Hospital Research Institute

CHARACTERISTICS OF GUIDELINES THAT AFFECT UPTAKE IN CLINICAL PRACTICE: RESULTS OF A REALIST REVIEW ON GUIDELINE IMPLEMENTABILITY

Presenter: Monika Kastner, PhD, Li Ka Shing Knowledge Institute of St. Michael's Hospital

AN INSTRUMENT TO MEASURE PRIMARY CARE PROVIDER OPINION OF THE USEFULNESS OF GUIDELINE COMPLIANCE REMINDERS

Presenter: Jill Marsteller, PhD, MPP, Johns Hopkins Bloomberg SPH

4F. DISSEMINATION AND IMPLEMENTATION MEETING: THE ROLE OF CULTURAL ADAPTATION IN DISSEMINATION AND IMPLEMENTATION RESEARCH

Room: Brookside B

Session: Panel

Chairs: Jacqueline Lloyd, PhD, National Institute on Drug Abuse
Belinda E. Sims, PhD, National Institute on Drug Abuse

Discussant: Felipe Castro, PhD, Arizona State University

Panelists: Elizabeth Stormshak, PhD, University of Oregon
Guillermo Prado, PhD, University of Miami
Nancy A. Gonzales, PhD, Arizona State University

4G. EVALUATING WHAT IT MEANS TO 'EMPLOY' THE RE-AIM MODEL: IMPLICATIONS FOR IMPLEMENTATION AND DISSEMINATION FRAMEWORKS

Room: Grand Ballroom (Salons A-D)

Session: Panel

Chair/Discussant: Russell E. Glasgow, PhD, National Cancer Institute

Panelists: E. Peyton Purcell, MPH, CPH, National Cancer Institute
Lisa M. Klesges, PhD, University of Memphis School of Public Health
Rodger S. Kessler, PhD, ABPP, University of Vermont College of Medicine

4H. PROXIMITY OF RESEARCH TO PRACTICE: WHAT DOES DELIVERY SYSTEM-BASED HEALTH SERVICES RESEARCH TEACH US ABOUT IMPLEMENTATION?

Room: White Oak B

Session: Panel

Chair: Lisa A. Simpson, MB, BCh, MPH, AcademyHealth

Panelists: Dominick Frosch, PhD, Palo Alto Medical Foundation Research Institute
Lucy A. Savitz, PhD, MBA, Intermountain Health Care
Edward Havranek, MD, Denver Health
Michael Seid, PhD, Cincinnati Children's Hospital Medical Center

Concurrent Session 1 Abstracts

Concurrent Session 1 Abstracts
March 19, 2012
10:45 a.m. – 12:15 p.m.

1A. IMPLEMENTATION OF SUBSTANCE ABUSE INTERVENTIONS

Room: Glen Echo

Session: Individual Oral Presentations

Chair: Kristen Huntley, PhD, National Center for Complementary and Alternative Medicine

IDENTIFYING VARIATIONS TO SUPPORT NATIONAL IMPLEMENTATION OF BEHAVIORAL COUPLES THERAPY IN VHA SUBSTANCE USE DISORDER TREATMENT PROGRAMS

Session: Individual Oral Presentation (1A)

Primary Contact/Presenter:

Elizabeth Gifford, PhD
Research Scientist
Center for Health Care Evaluation
795 Willow Road
Menlo Park, CA 94025
Tel: 650-493-5000 ext. 23362
elizabeth.gifford@va.gov

Co-authors:

Krystin Matthews, MPH; Eleanor T. Lewis, PhD; Megan Oser, PhD; Natalya Maisel, PhD; Hildi Hagedorn, PhD; Sara Tavakoli, MPH

Problem: Involving Veterans' partners and family members in mental health care is a national Veterans Health Administration priority. Behavioral Couples Therapy (BCT) treats alcohol abusing patients with their partner or family member and has significantly better outcomes than individual-based treatment, yet fewer than 2% of VA SUD clinical visits in 2010 included family members. This study aimed to identify clinician, program, and facility-level supports and barriers for BCT implementation and family involvement in SUD specialty care and to understand these barriers to support the upcoming system-wide roll out.

Methods: This was a mixed-methods study guided by the Promoting Action on Research in Health Services (PARiHS) framework and Roger's Diffusion of Innovations model. All outpatient SUD specialty care programs were screened, followed by in-depth-interview and Organizational Readiness to Change (ORCA) surveys of selected programs. The intensive interviews (N = 20) elicited information about facilitators and barriers of BCT implementation, including the characteristics of therapy, clients, therapists, and the context/environment. Coders transcribed interviews using 53 developed codes, and 1,294 coded pieces of text were analyzed using content analysis methods.

Findings: Of the 185 VA SUD outpatient programs, 6 implemented BCT and 25 implemented some family therapy. Practitioners have a positive view of BCT evidence (μ=4.04, σ=.49), but implementation context scores varied (μ=3.32, σ=.84) including negative resource scores (μ=2.3, σ=1.2). Five pathways for family involvement in care, and influential characteristics of BCT, clients, therapists, and the context/environment, were identified. Of Roger's innovation characteristics, relative advantage, simplicity, and adaptability for BCT were high, compatibility was mixed, and trialability was low.

A LARGE-SCALE RANDOMIZED TRIAL OF THE GETTING TO OUTCOMES IMPLEMENTATION SUPPORT INTERVENTION

Session: Individual Oral Presentation (1A)

Primary Contact:

Joie Acosta, PhD
Behavioral Scientist
RAND
1200 South Hayes Street
Arlington, VA 22202
Tel: 703-413-1100
jacosta@rand.org

Presenter:

Matthew Chinman, PhD, RAND Corporation

Co-authors:

Joie Acosta, PhD; Patricia Ebener, RAND Corporation

Problem: Government and foundations are investing significant resources in implementation support (e.g., training, technical assistance) to build community practitioners' capacity to implement promising and evidence-based programs (P&EBPs) well and replicate research outcomes. Despite this support's promise, the empirical evidence that it builds capacity or improves implementation at a large scale is limited. Large trials testing implementation support's impact on capacity and implementation quality at the community level are needed.

Methods: We will present findings from a cluster randomized community trial—among 12 prevention coalitions operating with very modest resources—of a two-year implementation support intervention called Getting To Outcomes™ (GTO), funded by National Institute of Drug Abuse (R01DA023277). We compared six coalitions and their programs that received GTO (manuals, training, technical assistance) to six that did not on "capacity" –knowledge and skills –of individual community practitioners, and the quality of actual program implementation across domains targeted by GTO (e.g., planning, program delivery, evaluation). A survey of individual practitioners at Baseline, Mid (one year), and Post (two years), assessed change on capacity (GTO n=281, Control n =310). Structured interviews with practitioners implementing 32 P&EBPs (16 GTO, 16 control) along the same schedule assessed changes in implementation quality. To account for the cluster randomized study design and the repeated measures among survey participants, we used generalized linear growth modeling that included random pair effects.

Findings: Survey findings indicated that individual practitioners that used GTO showed significantly greater improvements in capacity (knowledge and skills, $p<.05$) than non-users. Ratings of implementation quality showed greater improvement over time for GTO-assigned programs than non-GTO programs, and these improvements were strongly positively associated with the hours of GTO support received ($r=.64$).

Impact: This research advances the field of D&I because it provides empirical evidence that those who utilize an implementation support intervention (GTO) gain more in capacity and implementation quality than those who do not.

REVENUE STREAMS ASSOCIATED WITH THE IMPLEMENTATION OF MEDICATION-ASSISTED TREATMENT FOR OPIOID DEPENDENCE

Session: Individual Oral Presentation (1A)

Primary Contact/Presenter:

Hannah Knudsen, PhD
Assistant Professor
University of Kentucky
109 Medical Behavioral Science Building
Lexington, KY 40536-0086
Tel: 859-323-3947
hannah.knudsen@uky.edu

Co-authors:

Amanda J. Abraham, PhD; Lauren O'Brien, PhD; Paul M. Roman, University of Georgia

Objective: Despite the established utility of pharmacotherapies for the treatment of opioid dependence, implementation of medication assisted treatment (MAT) by substance use disorder (SUD) treatment programs is limited. We add to previous research by considering relationships between organizational factors and the implementation of MAT. Specifically, we examine associations between revenue streams, organizational structure, workforce resources, and program-level implementation of MAT.

Methods: Face-to-face structured interviews were conducted in 2008-2009 with administrators of 154 community-based treatment programs affiliated with the National Drug Abuse Treatment Clinical Trials Network (CTN); none of these programs exclusively dispensed methadone. Implementation of MAT was measured by summing the percentages of opioid patients receiving buprenorphine maintenance, methadone maintenance, and tablet naltrexone. Revenue streams included the percentages of revenues received from Medicaid, private insurance, criminal justice, the federal block grant, state government, and county government. Organizational structure and workforce indicators were also measured.

Findings: Implementation of MAT for opioid dependence was low (mean = 9.6, SD = 24.1). Bivariate models indicated that three revenue streams were significant: percentage of revenues from Medicaid (b=.02, SE=.01, $p<.05$), criminal justice (b=-.06, SE=.02, $p<.05$), and county government (b=-.02, SE=.01, $p<.05$). Greater reliance on Medicaid was positively associated with MAT implementation after controlling for organizational structure and workforce measures, while the association for criminal justice revenues was negative.

Implications: The implementation of MAT for opioid dependence by specialty SUD treatment programs may be facilitated by Medicaid, but is impeded by the extent of reliance on funding from the criminal justice system. These data suggest that funding sources directly affect choices about implementation, pointing to the further need to consider the impacts of organizational dependence on different revenue streams on patterns of treatment practice.

This research was supported by the National Institute on Drug Abuse (R01DA14482).

1B. D&I METHODS: FROM ETHNOGRAPHY TO SIMULATION MODELING

Room: White Oak A

Session: Individual Oral Presentations

Chair: Brian Mittman, PhD, Veterans Health Administration

USING LOCAL DATA TO FORECAST LIVES SAVED FROM HIV TREATMENT EXPANSION IN HAITI

Session: Individual Oral Presentation (1B)

Primary Contact/Presenter:

April Kimmel, PhD
Assistant Professor
VCU School of Medicine
Department of Healthcare Policy and Research
One Capitol Square
830 E. Main Street, 4th floor
Richmond, VA 23298
Tel: 804-628-6273
adkimmel@vcu.edu

Co-authors:

Daniel W. Fitzgerald, MD; Macarthur Charles, MD, PhD; Alison M. Edwards; MStat, Warren D. Johnson, MD; Bruce R. Schackman, PhD, Weill Cornell Medical College; Abdias Marcelin, GHESKIO; Jean W. Pape, MD, Weill Cornell Medical College, GHESKIO

Problem: International guidelines recommend early treatment initiation (CD4<350/μL) for HIV-infected individuals in resource-limited settings. However, funding availability for early versus standard (CD4<200/μL) treatment is uncertain. We forecast potential lives saved through further HIV treatment expansion in Haiti.

Methods: We used patient- and population-level data from Haiti to develop a country-specific mathematical model of HIV disease. Incidence density analysis was used to derive model inputs for treated and untreated HIV disease progression. We then projected the total number of HIV-infected individuals, number on treatment, and mortality by simulating multiple HIV-infected cohorts over 10 years. We assessed 5 treatment initiation scenarios: 1) no new treatment, 2) restricting treatment capacity to current levels, 3) current rates of early and standard treatment, 4) expanded early treatment, and 5) expanded early and standard treatment. In the model, patients receive two sequential treatment regimens and regimen switching occurs according to WHO guidelines.

Findings: By 2010, 11,500 deaths had been averted since the beginning of treatment scale-up in 2004 and 27,300 were receiving treatment. Continuing treatment initiation at current rates will require increasing the number on treatment to 43,300 by 2020, with 89,700 deaths estimated between 2010 and 2020. Compared to treatment initiation at current rates, expanded access to early and standard treatment will increase the number receiving treatment by 7,400 (+17.1%)

and avert 4,300 deaths (-4.8%) by 2020. Restricting treatment initiation to achieve constant treatment capacity will reduce the number on treatment by 15,700 (-36.3%) and result in 10,200 (+11.4%) additional deaths; no new treatment initiation will reduce the number on treatment by 25,600 (-59.1%) and increase deaths by 15,200 (+16.9%). Increases in HIV testing and linkage to and retention in care will avert additional deaths.

Conclusions: Simulation models relying on local data can improve the validity and acceptability of policy models in resource-limited settings.

Supported by the Fogarty International Center (D43 TW00018)

DOES MARKETING ENHANCE DISSEMINATION? RESULTS FROM A SYSTEM DYNAMICS SIMULATION STUDY

Session: Individual Oral Presentation (1B)

Primary Contact/Presenter:

Matthew Kreuter, PhD
Professor
Washington University in St. Louis
700 Rosedale Avenue
Campus Box 1009
St. Louis, MO 63112
Tel: 314-935-3701
mkreuter@gwbmail.wustl.edu

Co-author:

Peter S. Hovmand, PhD, Washington University in St. Louis

There is no shortage of evidence-based approaches and empirically supported programs to enhance the public's health, but there are few *systems* in place to bring these discoveries to the attention of practitioners and into use in practice settings. In business, the process of taking a product or service from the point of development to the point of use by consumers is carried out by a *marketing and distribution system*. We have argued that marketing and distribution responsibilities are largely unassigned, under-emphasized and/or underfunded for disseminating effective public health programs, and without them widespread adoption of evidence-based approaches is unlikely. We have identified three specific parts of such a system: user review panels, design and marketing teams and dissemination field agents. In this presentation we report on results from a simulation study comparing different designs of marketing and distribution systems. Five system dynamics computer simulation models were developed representing two "business-as-usual" systems representing passive diffusion of innovations (M0) and expert panel reviews (M1), and three alternative systems that added user panel reviews (M2), marketing teams (M3), and dissemination field agents (M4). Results were compared along two metrics: (1) average time from development to adoption, and (2) the ratio of effective innovations adopted to innovations developed (a proxy for the economic efficiency of each system). Results highlight important tradeoffs between being more selective of innovations, the time it takes to get effective innovations adopted, and the expected impact of effective innovations to end users. The models help explain why expert panels alone (M1) and expert panels with user panels (M2) only improve system performance in one dimension, why the addition of marketing teams (M3) has the best overall result, and why the addition of field agents (M4) does not improve adoption as originally hypothesized.

AN ETHNOGRAPHIC APPROACH TO STUDYING TECHNOLOGY USE: EVALUATING THE IMPLEMENTATION OF PATIENT-FACING KIOSKS AT FOUR CALIFORNIA EMERGENCY DEPARTMENTS

Session: Individual Oral Presentation (1B)

Primary Contact/Presenter:

Sara Ackerman, PhD, MPH
Postdoctoral Researcher
University of California, San Francisco
185 Berry Street, Suite 5700
Box 0560
San Francisco, CA 94143
Tel: 415-514-6286
sara.ackerman@ucsf.edu

Co-author:

Ralph Gonzales, MD, MSPH, UCSF

High expectations for new medical technologies coexist with wide variability in actual adoption and impact, and the frequent failure of "successful" projects to be sustainably incorporated into routine practice. This is in part due to the persistence of deterministic approaches to technology implementation, including assumptions that technology operates independently of context. Ethnography presents an important alternative approach to the study of technology use in complex social settings. Emphasizing in-depth qualitative methods, ethnography enables on-the-ground examination of how technologies dynamically shape and are shaped by human practices. The ethnographic case presented here evaluates the multi-sited implementation of a computer kiosk program designed to diagnose uncomplicated urinary tract infections among adult women, facilitate expedited care, and reduce clinic costs and patient wait times. After being developed and successfully adopted at an urgent care clinic, replicas of the kiosk were placed in four emergency departments. The adoption process at these new sites was characterized by unexpected barriers, including staff reluctance to refer patients to the kiosk and site-by-site variation in the proportion of patients found eligible for expedited care by the kiosk program. The device was ultimately abandoned at all but one of the sites. Interviews and observations revealed that ED staff believed the kiosk did not "work" and that it interfered with, rather than facilitated, routine triage activities. Institutional practice changes and ED spatial layout also contributed to, and dynamically interacted with, staff responses to the kiosk. We discuss how different forms of "evidence", including both research-based and pragmatic, practice-based knowledge, can conflict in implementation projects beholden to experimental study design and outcomes-driven funding. We propose that the sustainable adoption of new technologies is more likely when both designers' and users' criteria for success and failure are acknowledged and collaboratively responded to throughout the implementation process.

1C. DIET, WEIGHT AND PHYSICAL ACTIVITY

Room: White Flint Amphitheater

Session: Individual Oral Presentations

Chair: Madeline La Porta, MS, National Cancer Institute

"FIRST MOVER" INNOVATION IMPLEMENTATION AND THE CONCEPT OF COMPATIBILITY

Session: Individual Oral Presentation (1C)

Primary Contact/Presenter:

James Dearing, PhD
Senior Scientist
Kaiser Permanente
10065 E. Harvard Avenue, Suite 300
Institute for Health Research
Denver, CO 80231
Tel: 303-614-1327
james.w.dearing@kp.org

Co-authors:

Andrea Dunn, PhD; David B. Buller, PhD, Klein Buendel, Inc.

Active Living Every Day (ALED) was developed as a 20-week lifestyle physical activity program, originally called Project Active. Project Active was one of the first lifestyle programs to be tested in a clinical trial. Its purpose was to increase moderate to vigorous physical activity in sedentary adults. ALED was found to be effective in increasing moderate to vigorous physical activity at 6 months and 24 months and represented a shift from an "Exercise Training-Physical Fitness" paradigm to a "Physical Activity Health" paradigm, qualifying it as a "first-mover" or really new innovation high in perceived and actual radicality. Effectiveness of ALED has been replicated in other studies with sedentary adults, including those with chronic diseases such as arthritis, and fibromyalgia. ALED was selected for an RWJF translational study and more recently has been the object of an R01 implementation study with support from NHLBI.

We report the results of the implementation study. As of January 2010, 156 organizations in North America had adopted ALED. Telephone interviews were conducted and analyzed with stakeholders of 71 of these organizations. Interview data combined with archival records and expert knowledge of ALED's development, marketing, training, and implementation, sustained use and discontinuance suggest that while stakeholders became enthusiastic concerning its adoption, they misunderstood what this radical program implied for successful implementation. This analysis documents the importance and multifaceted nature of the concept of compatibility for "first-mover" or radical innovations with a new conceptualization based on our data of three innovation sub-attributes: innovation-implementer compatibility, (2) innovation-organization compatibility, and (3) innovation-client compatibility. We posit that radical innovations demand special attention to issues of compatibility. First mover innovations that achieve high degrees of compatibility across these three innovation sub-attributes have a better likelihood of diffusion and successful implementation.

LESSONS LEARNED FROM A STATEWIDE DISSEMINATION AND IMPLEMENTATION OF BODY & SOUL

Session: Individual Oral Presentation (1C)

Primary Contact/Presenter:

Linda Fleisher, PhD, MPH
Assistant Vice President
Office of Health Communications and Health Disparities
Fox Chase Cancer Center
510 Township Line Road
Cheltenham, PA 19012
Tel: 215-728-3690
linda.fleisher@fccc.edu

Co-authors:

Evelyn T. González, MA; Stacy N. Davis, PhD, MPH; Fang Zhu, PhD, Fox Chase Cancer Center; Danielle M. Crookes, MPH, Mt. Sinai School of Medicine, Serina Gaston, MEd, CHES, Pennsylvania Department of Health

Dissemination of evidence-based programs reveals effective pathways for program promotion and gives insight into community uptake of and fidelity to an intervention. Previous research has shown the efficacy and effectiveness of Body & Soul, a faith-based intervention designed to increase fruit and vegetable consumption among African Americans. However, little has been published about the dissemination and implementation of Body and Soul in real world settings.

A statewide dissemination of Body & Soul among African American churches in Pennsylvania was evaluated. In addition to utilizing the NCI dissemination model (coordination body→ community partner→ churches), PA Body & Soul provided mini-grant funds to community partners and churches, ongoing educational opportunities, and regular communication (newsletters, site visits). Over a 12-month period, churches developed their own activity plan within the four program pillars and participated in qualitative and quantitative evaluation.

The dissemination model, funding and training aided program adoption across the state. From 2008-2011, we have reached approximately 22,000 people from 49 churches in 16 counties across Pennsylvania. However, implementation fidelity ranged across churches; 56% of churches implemented two or three pillars. Four barriers to implementation were identified: church recruitment, minimal congregation participation, lack of support by community partners, and insufficient peer coaching training.

Programmatic solutions have been identified to address barrier implementation. The solutions entailed adapting training to strengthen execution of weak pillars, developing webinars for continuing education, developing pillar tip sheets, and increasing communication with community partners to identify implementation problems early.

Variable adoption of PA Body and Soul by churches may have lessened the impact of the program to increase fruit and vegetable consumption. The lessons learned from this research allow the identification and resolution of challenges in program implementation. This allows churches to increase their capacity building and sustainability of this and similar programs.

Funded by Pennsylvania Department of Health

IMPLEMENTATION OF EVIDENCE-BASED SERVICES FOR WEIGHT AT SPECIALTY MENTAL HEALTH CLINICS

Session: Individual Oral Presentation (1C)

Primary Contact/Presenter:

Amy Cohen, PhD
Psychologist/Health Services Researcher
Greater Los Angeles VA
11301 Wilshire Boulevard, 210A
Los Angeles, CA 90073
Tel: 310-478-3711
ancohen@ucla.edu

Co-authors:

Amy N. Cohen, PhD, Greater Los Angeles VA; Alison Hamilton, PhD, MPH, Greater Los Angeles VA and UCLA; Kirk McNagny, MD; Christopher Reist, MD, Long Beach VA; Anna Teague, MD, Durham VA

Problem: Obesity and related medical problems are common in people with serious, persistent mental illness, and result in substantial premature mortality. In this population, weight loss services have efficacy in clinical trials. However, these evidence-based services have had minimal uptake in routine care. EQUIP was a large-scale, clinic-level controlled trial to evaluate the implementation and effectiveness of two evidence-based practices, one of which was a weight program for individuals with schizophrenia.

Methods: Across four states, 8 mental health clinics of the Veterans Administration were assigned to implementation or usual care. 801 adults with schizophrenia and 171 clinicians enrolled. Computerized patient self-assessment kiosks were integrated into care. Staff were trained to deliver a manualized weight management program. Patients and clinicians were interviewed at baseline and 15 months. Mixed methods evaluated organizational readiness, implementation processes, and intervention effectiveness.

Findings: At baseline, interviews revealed shortcomings with competencies regarding weight management, and variation in readiness to improve care. Data informed implementation of a tailored, evidence-based quality improvement intervention. At implementation sites, use of weight services increased from 15% to 32% of overweight patients, and the average number of weight sessions attended increased from 2 to 11. At control sites, weight services were used by 26% of overweight patients, an average of 2 weight session were attended, and there were no changes over time. Controlling for pre-baseline and baseline weight, patients' final weight at implementation sites was an average of 13 pounds less than at control sites ($F=4.8$, $p=.03$).

Conclusions: In specialty mental health, overweight is a pervasive problem, but only a small proportion of patients receive appropriate services. Quality improvement is possible with evidence-based implementation strategies and tools. Increased use of appropriate services improves patient outcomes. Mental health specialty care can benefit from multifaceted implementation of evidence-based services, with tailoring to local context.

Primary Funding:U.S. Department of Veterans Affairs Health Services Research and Development Service and QUERI

Other Funding: NIMH

1D. INNOVATIVE METHODS TO STUDY D&I

Room: White Oak B

Session: Individual Oral Presentations

Chair: Irene Prabhu Das, PhD, National Cancer Institute

ASSESSING ORGANIZATIONAL READINESS FOR CHANGE IN IMPLEMENTATION RESEARCH; RESULTS FROM IMPLEMENTATION OF TEAM BASED CARE FOR PERINATAL DEPRESSION

Session: Individual Oral Presentation (1D)

Primary Contact/Presenter:

Ian Bennett, MD, PhD
Faculty
University of Pennsylvania School of Medicine
2nd Floor Gates Pavilion
3400 Spruce Street
Philadelphia, PA 19104
Tel: 215-614-0849
ian.bennett@uphs.upenn.edu

Co-authors:

Bryan J. Weiner, PhD, UNC Gillings School of Global Public Health; Donna Cohen, MD, MSC, Lancaster General Health; Steven Marcus, PhD; Frances Barg, PhD, University of Pennsylvania

Background: Although organizational readiness is thought to be a determinant of successful care innovation implementation there has been little empirical evaluation of this construct or its association with successful implementation efforts. In the current study we assess the characteristics of a novel instrument based on organizational theory in the context of an implementation study of team based care for perinatal depression.

Methods: The study was carried out among clinical and support staff from four primary care sites participating in a study funded by the RWJ Foundation. An internet based survey with 22 items was disseminated in January-March of 2011 after training but before implementation. The survey included items assessing the two domains: 1) change efficacy (8 items), and 2) change commitment (5 items). Association of these scores with time to implementation of the team based processes was the primary outcome measure.

Results: Results were collected from 57 of 89 potential respondents (response rate 64%). Scale internal consistency measured for the full sample was excellent for both change efficacy (Chronbach $\alpha = 0.963$) and change commitment (Chronbach $\alpha = 0.944$). Measures of within site group agreement were good or excellent for change efficacy (Chronbach $\alpha = 0.829\text{-}0.979$; ICC = 0.491-0.957) and change commitment (Chronbach $\alpha = 0.808\text{-}0.964$; ICC = 0.344-0.840). Change efficacy but not change commitment was significantly associated with the site with early implementation (3 months) versus the other three sites (5, 6, and >10 months; $P<0.05$). Change efficacy but not change commitment was higher among the early implementing site and lower in the late implementing site compared to the others ($P<0.05$).

Discussion: Effective measures of organizational readiness may contribute to implementation of care innovations into primary care settings. We describe a brief instrument which had excellent psychometric properties and predicted time to implementation of a complex team based intervention.

NETWORK CENTRALIZATION AND PREDICTING DISSEMINATION OF EVIDENCE-BASED GUIDELINES IN EIGHT STATE TOBACCO CONTROL NETWORKS

Session: Individual Oral Presentation (1D)

Primary Contact/Presenter:

Bobbi Carothers, PhD
Data Analyst
Center for Tobacco Policy Research
Washingon University in St. Louis
700 Rosedale Avenue, CB 1009
St. Louis, MO 63112
Tel: 314-935-3745
bcarothers@wustl.edu

Co-authors:

Lana M. Wald, MA; Laura E. Bach, BA; Jenine K. Harris, PhD; Douglas A. Luke, PhD,
Washington University in St. Louis

Introduction: Public health agencies often partner in order to effectively address complex problems in the face of limited resources. Using evidence-based guidelines is one way to ensure effective strategies are implemented. Knowing how these guidelines are disseminated is important to ensure proper diffusion.

High levels of contact and collaboration between agencies were expected to predict a greater likelihood of guideline dissemination. Dependence on lead agencies was expected to increase with the formality of the relationship (from contact to collaboration to dissemination).

Methods: Networks of organizations in eight state tobacco control programs were evaluated. Interviews were conducted with individuals asking about the amount of contact and level of collaboration they had with each of the other agencies in their state, as well as whether or not dissemination of evidence-based guidelines had occurred between them.

Social network analysis (descriptive and ERGM methods) was used to analyze the data.

Findings: The degree to which a few agencies link other agencies that would otherwise not be linked increased as the formality of communication increased. This can indicate a high dependence on certain agencies to maintain relationships in the network.

Higher levels of contact and collaboration between agencies both uniquely and positively predicted a greater likelihood of dissemination.

How research advances the field of D&I: Relationships among public health organizations influence the dissemination of evidence based practices; however, we know little about the organizational characteristics and global structures most important in this process. We used new statistical network modeling techniques (ERGM) to develop models which can inform future dissemination efforts. In order to avoid the bottlenecks that may occur with lower-density networks dependent on lead agencies, partners could make use of pre-existing contact and collaboration relationships to disseminate evidence-based guidelines and other important information.

Primary source of funding: National Association of Chronic Disease Directors

PARTICIPATORY METHODS PROVIDING INFORMATION ON EVIDENCE-BASED PRACTICES AND WHERE TO FIND PRACTICAL ADVICE ON HOW TO IMPLEMENT THEM

Session: Individual Oral Presentation (1D)

Primary Contact/Presenter:

Gregg Moor, BA
Project Manager and Director
InSource Research Group
982 Thermal Drive
Coquitlam, BC V3J 6S1
Canada
Tel: 604-469-1248
gregg.moor@in-source.ca

Co-authors:

Scott J. Leischow, PhD; Jonathan (Jeb) Beagles; Keith Provan, University of Arizona; Jessie Saul, PhD, North American Quitline Consortium; Erin Ruppel, PhD, Suny-Brockport

Every state and province in the U.S. and Canada, respectively, has a free telephone quitline to help smokers quit. Unfortunately, we know little about how best practices and innovations are implemented in those quitlines. The Knowledge Integration in Quitlines: Networks that Improve Cessation (KIQNIC) study uses social network analysis and other methods to examine the flow of information about tobacco cessation quitline practices throughout the organizations that comprise the North American Quitline Consortium (NAQC), and seeks to improve the flow of information about evidence-based and innovative practices.

As part of this project, the research team has classified 23 quitline practices according to level of evidence for both efficacy and reach. In this participatory study, quitline representatives responded to an annual survey indicating to what level they are aware of these practices, whether they have implemented them, and if so, to what extent each one has been implemented. Data will be presented showing shifts over time in the levels of implementation of evidence-based practices across quitlines during a period of fiscal constraint, including the spread of text messaging as an emerging practice. Research products designed to support quitline decision makers seeking information about adopting and implementing evidence-based practices within the network of quitlines will also be discussed.

This research shows how social network analysis can be combined with tailored communications tools to facilitate the flow of information about evidence-based and emerging practices through an interorganizational network.

The KIQNIC project is funded by Grant Number R01CA128638-03 from the National Institutes of Health to the University of Arizona Cancer Center. Additional support is provided by Cancer Center Support Grant (CCSG - CA 023074).

1E. TRANSLATION RESEARCH IN A DENTAL SETTING

Room: Forest Glen

Session: Panel

Primary Contact:

Linda Young, PhD, MA, NHS
Research Manager
NHS Education for Scotland
Frankland Building
Small's Wynd
Dundee, DD1 4HN
Tel: +44 1382 740 968
linda.young@nes.scot.nhs.uk

Chair:

Jan Clarkson, PhD, BDS, BSc, FDS, RCSEd, University of Dundee

Discussant:

Jeremy Grimshaw, MBChB, PhD, FRCGP, University of Ottawa

Panelists:

Jan Clarkson, PhD, BDS, BSc, FDS, RCSEd, University of Dundee
Craig Ramsay, PhD, MSc, University of Aberdeen
Linda Young, PhD, MA, NHS, Education for Scotland
Douglas Stirling, PhD, Education for Scotland

Presentation 1:

TRANSLATION RESEARCH IN A DENTAL SETTING: ORAL HEALTH ASSESSMENT DIAGNOSTIC ANALYSIS

Presenter: Linda Young, PhD, MA, NHS

Introduction: National clinical guidance in Scotland recommends that dentists conduct regular comprehensive oral health assessments (OHA) (SDCEP, OHAR, 2011). The aim is to support dentists move from a restorative approach to a long-term, preventive risk-based approach that involves and meets the needs of individual patients. To support the development and implementation of this guidance, Scotland's Translation Research in a Dental Setting Programme conducted a diagnostic analysis to identify 1) current practice; and 2) the barriers and facilitators to implementation.

Methods: The diagnostic analysis employed a range of research methods including questionnaire and semi-structured interviews and an in-practice implementation feasibility study. The analysis tools were also utilised in a national audit which included an embedded trial of a theoretically informed communication.

Results: Fifty-seven dentists completed a questionnaire and 12 participated in telephone interviews. None were following the recommendations, and all perceived the barriers to implementation as: time; insufficient

remuneration; insufficient clinical knowledge; and patient resistance. Nine dentists participated in the in-practice implementation study. Each carried out a retrospective analysis of their practice records to identify compliance with the guidance and to inform action plans for implementation. OHAs were then conducted on 10 patients. Dentists reported undertaking an OHA was not as onerous or time consuming as anticipated. All welcomed the emphasis on 'co-responsibility' between the patient and dentist and believed patients had reacted positively. The barriers were remuneration, unavailability of suitable practice software and lack of training. Only 11% of patients preferred their usual type of check-up. The audit was completed by 924 dentists and the theoretically informed communication increased participation by 10%.

Implications: Policy-makers are using the findings to support discussions concerning changes to remuneration. New software and national training courses are being developed. The national audit has raised awareness of and support for the guidance within the profession.

Funding: NHS Education for Scotland

Presentation 2:
TRANSLATION RESEARCH IN A DENTAL SETTING: A FRAMEWORK FOR KNOWLEDGE TRANSLATION
Presenters: Jan Clarkson, PhD, BDS, BSc, FDS, RCSEd; Douglas Stirling, PhD

Introduction: A common policy strategy to help promote knowledge translation (KT) is the production of clinical guidance. However, it has been demonstrated that the simple publication of guidance is unlikely to optimise practice.

For dentistry in Scotland, the production of national clinical guidance is the responsibility of the Scottish Dental Clinical Effectiveness Programme (SDCEP). To support translation of SDCEP guidance into practice, TRiaDS (Translation Research in a Dental Setting), a multidisciplinary research collaboration, has developed a programme of KT research embedded within the guidance development process.

Methods:The TRiaDS standardised framework enables a timely assessment of the impact of each SDCEP guidance document and a theoretically informed approach to the need for and choice of additional KT interventions. For each guidance document, a diagnostic analysis begins at the start of guidance development. Information is gathered about current practice. Key recommendations and associated behaviours are identified and prioritised. Stakeholder questionnaires and interviews are used to identify potential barriers and enablers. Where possible, routinely collected data are used to measure compliance with the guidance and to inform decisions about whether a KT intervention is required.

Results: The TRiaDS framework has been applied to seven guidance documents. The findings have informed the guidance development process for all seven topics. For two topics (decontamination and oral health assessment) KT interventions have been informed by the diagnostic analysis and evaluated in randomised controlled trials embedded within routine service delivery.

Implications: The embedding of TRiaDS within a national programme of guidance development offers a unique opportunity to inform and influence the guidance development process. TRiaDS is able to inform dental services practitioners, policy-makers and patients on how best to translate national recommendations into routine clinical activities. In addition, although based in primary dental care and focused on SDCEP guidance, the TRiaDS framework is generalisable across disciplines.

Funding: NHS Education for Scotland

Presentation 3:
TRANSLATION RESEARCH IN A DENTAL SETTING: EVALUATING PRACTICE SUPPORT VISITS
Presenter: Craig Ramsay, PhD, MSc

Background: 180 million instruments are decontaminated in dental primary care in the UK but compliance with best practice guidance is suboptimal and therefore increases the risk of healthcare acquired infections. Passive dissemination of guidance is known to have little effect and robust evidence from trials of different implementation interventions is needed.

Objective: In comparison to postgraduate education alone, does the provision of postgraduate education coupled with theory-based, individualised, practice support visits lead to an effective increase in the implementation of guidance on the cleaning of dental instruments in dental primary care?

Methods: 104 dental practices were randomised to either receive a postgraduate education course or the course together with an in-practice visit from a support team. The support team implementation strategy involved identifying behaviours that were in accordance with guidance; set goals and action plans; and provided prompts or reminders if required. The primary outcome was the proportion of practices performing all 13 key decontamination behaviours at 12 months post-implementation. Secondary outcomes included individual behaviour and health care provider's beliefs about each decontamination behaviour.

Results: There was a significant increase in the proportion of practices performing all key behaviours: 11% course alone versus 31% for course and practice visits (odds ratio 3.5; 95%CI 1.2 to 10.5; p-value 0.023). Decluttering of workspace (64% versus 83%) and appropriate drying of utensils (57% versus 72%) were the major changes in individual practice behaviour. There was a general improvement from baseline.

Implications: This is the first study (in a dental setting) to demonstrate the size of effects related to in-practice visits. The theoretically derived interventions and findings are generalisable to the implementation field.

Funding: NHS Education for Scotland funded this work.

1F. IMPLEMENTATION PROCESS & OUTCOME MEASURES: EVIDENCE USE & CULTURAL EXCHANGE; IMPLEMENTATION CLIMATE & LEADERSHIP; STAGES OF IMPLEMENTATION COMPLETION

Room: Grand Ballroom (Salons A-D)

Session: Panel

Primary Contact/Chair:

Gregory Aarons, PhD
Professor
University of California, San Diego
9500 Gilman Drive (0812)
La Jolla, CA 92093-0812
Tel: 858-966-7703
gaarons@ucsd.edu

Discussant:

Enola Proctor, PhD, Washington University St. Louis

Panelists:

Lawrence Palinkas, PhD, University of Southern California and Child and Adolescent Services
Gregory A. Aarons, PhD, University of California, San Diego
Lisa Saldana, PhD, Center for Research to Practice

Overview

Problem: Implementation researchers and practitioners have been utilizing or adapting measures for use in implementation studies. Some existing measures can inform implementation research to some degree but measures targeted at implementation specific constructs, processes, and outcomes are needed.

Methods: The three papers in this panel describe measures developed specifically to assess processes and outcomes for dissemination and implementation research. The first presentation will describe the development and psychometrics of two measures of the use of research evidence, and the extent to which there has been collaboration, communication and compromise during the implementation process. The second presentation will describe the development and psychometrics of two organizational process measures assessing leadership for implementation and strategic organizational climate for implementation. The third presentation will describe an observation based measure developed to assess duration, and outcomes of implementation stages and the potential utility of the measure across different interventions and settings.

Findings: All three presentations will present empirical findings based on qualitative and/or quantitative methods. Indices of instrument integrity will be presented including factor analytic results, reliability estimates, and validity data. All instruments have good to excellent psychometric characteristics and are being further tested in currently funded implementation studies. The measures are parsimonious and practical and thus will likely have high utility for implementation research and practice.

Relevance: The individual presentations and the panel as a whole advance the field of D&I science and practice by developing new implementation constructs and related measures to assess implementation context, processes, and outcomes.

Funding: NIMH; W.T. Grant Foundation; NIDA; CDC

Presentation 1:

MEASUREMENT OF IMPLEMENTATION PROCESS: THE STRUCTURED INTERVIEW OF EVIDENCE USE (SIEU) AND THE CULTURAL EXCHANGE INVENTORY (CEI)

Presenter: Lawrence Palinkas, PhD

Co-authors: Antonio Garcia, PhD; Gregory A. Aarons , PhD; Ian Holloway, MSW, MPH; Megan Finno, MSW; Dahlia Fuentes, MSW, MPH: Patricia Chamberlain, PhD

Problem: Two critical components of evidence- based practice (EBP) implementation process are stakeholder use of research evidence, and interactions among key stakeholders. However, there are no existing reliable and valid instruments to measure these constructs. This paper describes the development of two instruments designed to measure how research evidence is acquired, evaluated and applied in implementation decisions and the interactions among implementation stakeholders.

Methods: SIEU items were developed through a focus group with 8 child-welfare directors and semi-structured interviews of 54 child-welfare, mental health and juvenile justice agency directors in 40 California and 11 Ohio counties participating in a randomized controlled trial of Community Development Teams (CDT) to scale up an EBP for youth behavior disorders. Items for the CEI were developed by coding videotaped interactions among directors of agencies in the same county, agencies in different counties, treatment developers, and intermediary organization representatives at four CDT meetings. These instruments were then administered to 142 systems leaders in a web-based survey.

Findings: We identified three domains of evidence use for the SIEU: (1) source of research evidence, (2) assessment of evidence validity, reliability and relevance, and (3) application of evidence in implementation decisions. We found two CEI domains representing process and outcomes of cultural exchange among implementation stakeholders. Factor loadings were moderate to large and internal consistency reliabilities ranged from .74 to .86 for the three domains of the SIEU and were .92 for the CEI. Convergence of these factors with evidence-based practice attitudes and organizational culture and climate was small to moderate suggesting that the newly identified factors represent distinct dimensions of implementation process and outcomes.

Relevance to D&I: Development of valid and reliable measures of implementation process is essential to advancing theory and designing more effective strategies for implementation and sustainment of EBPs.

Funding: NIMH, W.T. Grant Foundation

Presentation 2:

IMPLEMENTATION CLIMATE AND LEADERSHIP FOR EVIDENCE-BASED PRACTICE IMPLEMENTATION: DEVELOPMENT OF TWO NEW SCALES

Presenter: Gregory A. Aarons, PhD

Co-authors: Mark Ehrhart, PhD, Lauren Dlugosz, BA

Problem: There is a need for reliable and valid measures to assess leadership and organizational climate for evidence-based practice (EBP) implementation and there is increasing attention to organizational context and factors that can facilitate efficient and effective implementation. More attention has been on general organizational climate but little attention has focused on strategic climates and leadership that may support or detract from effective implementation. This paper describes the development and psychometrics of strategic climate and leadership for EBP implementation. Such measures are needed to advance theory, assess organizational context, to support effective implementation.

Methods: We developed items as part of an NIMH funded project focusing on leadership and organizational process to facilitate effective EBP implementation. The initial item pool was based on theories of innovation implementation from the business and management literature. The resulting Implementation Climate Assessment (ICA) has 57 items representing nine factors including: staff support, educational support, selection, recognition, and acceptance. The Implementation Leadership Assessment (ILA) has 30 items representing five factors including: leader knowledge, support, strategies, attitudes, and readiness for EBP. We assessed the a-priori factor structure with data from clinicians and their supervisors in mental health programs in California.

Findings: We found good replicability of domains of implementation climate and implementation leadership as suggested by the literature. Analyses supported the a-prior factor structures, reliability, and validity of the measures with good to excellent internal consistency reliability for the ICA (α=.957; range=.80-.94) and the ILA (α=.952; range=.91-.94). We also found that measurement of organizational climate and leadership for implementation was of interest to the study teams and agencies.

Relevance: This work advances implementation science through the translation and application of management and organizational theory to implementation in health care and allied health care settings. It provides to practical measures to assess implementation constructs.

Funding: NIMH, CDC

Presentation 3:

THE STAGES OF IMPLEMENTATION COMPLETION: MEASUREMENT PROPERTIES AND USES

Presenter: Lisa Saldana, PhD, Center for Research to Practice

Co-authors: Patricia Chamberlain, PhD; Jason Chapman, PhD; Wei Wang, PhD

Problem: Although many evidence-based practices (EBPs) are developed, there remain large gaps in our knowledge of how to routinely move them into usual care. Little is known about the key processes necessary for successful implementation, including the steps to effectively transport EBPs and how to monitor if these

steps have occurred well. Efforts to examine implementation duration and outcomes are hindered by the lack of available tools to describe and measure the processes and stages of implementation.

Method: The Stages of Implementation Completion (SIC), an 8-stage observation-based tool, was developed as part of a randomized implementation trial of 51 counties, to measure implementation progress of Multidimensional Treatment Foster Care (MTFC) under two implementation strategies. Stages range from "Engagement" with developers (Stage 1) to "Competency" (Stage 8). These stages map onto three well-documented phases of implementation: pre-implementation, implementation, and sustainability. Coding is date-driven and yields scores including Proportion (number of implementation activities completed) and Duration (length of time in each stage). Although developed to measure implementation of MTFC, the potential generalizability of the SIC to other EBPs is being explored.

Findings: The SIC has demonstrated success in coding both research recruited and real-world MTFC sites. Using Rasch modeling to handle challenges of multi-level, non-linear, proportion and duration-based scores, SIC scores are found to be adequately heterogeneous, reliable with no concern of item misfit, and show an adequate range of item difficulty. SIC scores are able to accurately distinguish between sites with varying levels of implementation performance. Proportion and Duration scores, during pre-implementation, significantly predict downstream implementation milestones such as successful program start-up.

Relevance: The potential for the SIC to be extended to other practices and to measure varying implementation strategies fills a gap for implementation researchers and provides practical utility for purveyors of EBPs.

Funding: NIMH; NIDA

1G. IMPLEMENTATION OF GENOMIC MEDICINE

Room: Brookside A

Session: Panel

Primary Contact/Chair:

Marc S. Williams, MD

Genomic Medicine Institute, Geisinger Clinic

Panelists:

Marc S. Williams, MD, Genomic Medicine Institute, Geisinger Clinic

Lori A. Orlando, MD, MHS, Institute for Genomic Sciences & Policy

David Mrazek, MD, Mayo Clinic

Problem: How to successfully implement precision medicine approaches in clinical practice.

Methods: In this forum, 3 examples will be presented, each of which used different implementation strategies. Results showing improved care for each project will be presented.

- Incorporation of family history into primary care practice. This project at Duke University utilized technology and e-Health to promote dissemination and implementation. Mixed methods research was used prior to and during pilot implementation and the results were used to inform more widespread implementation. Patient and provider outcomes were defined and measured pre- and post-implementation to demonstrate improved care. Funding: Institutional support, Department of Defense Grant #W81XWH-05-1-0383.
- Use of pharmacogenomic information to improve the use of neuropsychiatric medications. These projects at the Mayo Clinic identified pharmacogenomic targets that had adequate evidence for consideration of implementation. The project developed methods to scale-up and support large scale dissemination and implementation throughout the Mayo system with ongoing capture of patient outcomes of interest, including both medical and patient-reported outcomes. Funding: Institutional support
- Tumor-based screening for Lynch syndrome. This project at Intermountain Healthcare utilized simulation modeling for dissemination and implementation to aid organizational decision making about initiation of screening. The modeling was done from the system perspective and led to endorsement of the screening. After two years of screening the results of the program were compared to the modeled results for costs and patient outcomes and showed close agreement validating the use of modeling to inform implementation. Funding: Institutional support.

The three projects demonstrate that the tools of implementation science can be utilized to improve care at the individual patient level while generating generalizable knowledge about how these tools can be modified to facilitate research in precision medicine.

1H. DIABETES DISSEMINATION AND IMPLEMENTATION RESEARCH

Room: Brookside B

Session: Panel

Primary Contact/Chair:

Christine Hunter, PhD, ABPP
Director of Behavioral Research
Division of Diabetes, Endocrinology, and Metabolic Diseases
National Institute of Diabetes & Digestive & Kidney Diseases
National Institutes of Health
6707 Democracy Boulevard, Room 605
Bethesda, MD 20892-5460
Tel: 301-594-4728
hunterchristine@niddk.nih.gov

Panelists:

Jeffrey A. Katula, PhD, MA, Wake Forest School of Medicine
Andrea Kriska, PhD, MS, University of Pittsburgh
Russell Rothman, MD, MPP, Vanderbilt University Medical Center

This panel, sponsored by the National Institute of Diabetes and Digestive and Kidney Diseases, will focus on dissemination and implementation research in diabetes. Several large, controlled clinical trials have established "gold standard" approaches for treating 2 diabetes and for preventing or delaying type 2 diabetes in individuals at high risk for developing the disorder. Despite these advances, the efficacious interventions from these trials are rarely translated into widespread practice. This panel will address some of the ongoing research to address this gap in research and practice. The first two speakers will discuss studies testing translations of the Diabetes Prevention Program (DPP). Dr. Jeffrey Katula will present study results and experiences from the Healthy Living Partnership to Prevent Diabetes (HELP PD) trial; a translational study of 300 overweight or obese persons with pre-diabetes randomized to usual care or a group-based lifestyle intervention (based on DPP) facilitated by community health workers. Dr. Andrea Kriska will describe the Group Lifestyle Balance Program (GLB), updated and modified from the DPP and currently being offered in diverse community settings, nationally and internationally, with over 1000 health care professionals currently trained. Various process aspects of the GLB are being formally evaluated in three different settings (worksite, community centers, and military). Dr. Russell Rothman will present information on his cluster-randomized trial that partners with the Tennessee Department of Health to assess the efficacy of a low- literacy/numeracy-oriented intervention to improve diabetes care in under-resourced communities. Dr. Rothman will also briefly discuss a project using community based participatory research and health information technology to improve diabetes care in Native Americans. In addition to presenting current research efforts, panelists will discuss some of the challenges encountered, important lessons learned, and their perspectives on opportunities for future dissemination and implementation research in the field of diabetes and more broadly.

Concurrent Session 2 Abstracts

Concurrent Session 2 Abstracts
March 19, 2012
1:45 – 3:15 p.m.

2A. IMPLEMENTATION IN THE COMMUNITY CONTEXT

Room: White Oak A

Session: Individual Oral Presentations

Chair: Tisha Wiley, PhD, National Institute on Drug Abuse

COMPARISON OF ONLINE AND FACE-TO-FACE TRAINING IN THE CRITICAL TIME INTERVENTION MODEL

Session: Individual Oral Presentation (2A)

Primary Contact/Presenter:

Suzanne Zerger, PhD
Senior Associate
Center for Social Innovation
200 Reservoir Street, Suite 202
Needham, MA 02494
Tel: 617-947-8761
szerger@center4si.com

Co-authors:

Sam Johnston, PhD; R. Neil Greene, MA; Rachael Kenney, MA, Center for Social Innovation

Problem: Clinical social workers and other staff providing direct care to individuals experiencing homelessness face multiple challenges in obtaining training and implementing evidence-based practices in diverse community settings. Critical Time Intervention (CTI) is an increasingly popular EBP with these agencies; it is a time-limited case management model designed to prevent homelessness and other adverse outcomes in people with severe mental illness following discharge from hospitals, shelters, prisons and other institutions. With funding from a Phase II Small Business Innovation Research grant from the National Institute of Mental Health, the Center for Social Innovation developed an online multi-media training on CTI which incorporates a Community of Practice approach to encourage peer-based learning. The primary aim of this longitudinal, randomized-control study is to compare and contrast this online training modality with a face-to-face training on implementation of and fidelity to the CTI model over time.

Methods: Nearly two-hundred direct service providers from 20 homeless-service agencies were randomly assigned to complete either an online or face-to-face training in CTI. Pre-post training and knowledge-retention surveys, interviews with trainers, agency administrators, and providers were conducted to track satisfaction with the training and experiences in implementing CTI. CTI-specific chart forms are used to assess fidelity to the CTI model, and administrative data from the agencies capture client-level outcomes.

Findings: This presentation will report on findings from both of the CTI training interventions, including satisfaction, knowledge-retention, and costs. We will also share findings on CTI-readiness from participating agencies and on implementation barriers and facilitators from the perspectives of the providers, trainers, and agency administrators.

This study offers new insight into the capacity of web- and peer-based learning to inform providers in poorly-resourced homelessness service agencies in an evidence-based practice, and their experiences with adapting and implementing that EBP in diverse settings over a one-year period.

IMPLEMENTATION OF A COLORECTAL CANCER SCREENING PROGRAM AT A COMMUNITY HEALTH CENTER: CREATING MOMENTUM FOR POSITIVE CHANGE

Session: Individual Oral Presentation (2A)

Primary Contact/Presenter:

Mei Po Yip, PhD
Acting Assistant Professor
University of Washington
325 9th Avenue
Seattle, WA 98104
Tel: 206-221-3212
yipm@u.washington.edu

Co-authors:

Sherry Feng, BA; Shin-Ping Tu, MD, MPH, University of Washington; Hoai Do, BA, MPH; Jocelyn Talbot, BA, Fred Hutchinson Cancer Research Center; Alan Chun, MD, International Community Health Services

Background: Process evaluation contributed to our understanding of the implementation of a complex health services intervention. "Context" is an important mediating construct that significantly influences the initiation, ongoing implementation, and implementation fidelity of an intervention, but it has seldom been studied in process evaluation. This case study describes changes enacted in individual and organizational contexts during the active implementation of a research-tested colorectal cancer screening program at a community health center (CHC).

Methods: We conducted 17 key informant interviews with providers, medical assistants, and clinic staff in leadership positions during the 24 months of active implementation. Interviews were audio-recorded, transcribed, and analyzed by Atlas.ti. A log documenting exposure, adherence, and coverage of the implementation was used to describe implementation fidelity. We also collected information, such as staff turnover and electronic medical record upgrades.

Results: CHC's mission and value guided the envisioned implementation. EHR provided objective data on the decision-making process. Using implementation processes that fit the existing workflow accelerated the integration, standardization, and routinization of the intervention, thereby promoting sustainability. Human capital is another "context" influencing implementation. Knowledge and skills is essential for the sense-making necessary to implement the new program. However, permitting flexibility in the delivery of an intervention may result in differential implementation fidelity. Threats to implementation included unanticipated changes in the clinic environment, such as budget cuts, changes in resource allocation and staff turnover. Efforts to implement the intervention while simultaneously delivering other clinical services resulted in increased workload, affecting the delivery of the intervention.

Conclusions: Momentum leading to positive change requires a continuous team effort. People and time are important resources, and they are often interdependent. A successful implementation requires an infrastructure that supports implementation, problem solving, communication, and evaluation. Attention to the change of larger "context" in the external environment may minimize disruption of implementation.

A LATENT PROFILE ANALYSIS OF THE IMPLEMENTATION OF EVIDENCE-BASED PRACTICES IN COMMUNITY SUBSTANCE ABUSE TREATMENT SETTINGS

Session: Individual Oral Presentation (2A)

Primary Contact/Presenter:

Junqing Liu, PhD
Research Assistant Professor
University of Maryland at Baltimore
525 W. Redwood Street
Baltimore, MD 21201
Tel: 410-706-7051
jliu@ssw.umaryland.edu

Co-author:

Brenda D. Smith, PhD, University of Alabama

Problem: As pressures to implement evidence-based practices (EBP) intensify, it is not clear how practitioners balance evidence-based and traditional practices, which is commonly done in human service organizations (Melnyk & Overholt, 2011). This study aims to (1) identify practice profiles that may reflect a combination of evidence-based and traditional practices and (2) examine the impact of organizational culture characteristics on practice profiles.

Methods: The study is based on a cross-sectional survey of 276 (response rate 68%) counselors from 45 (response rate 81%) outpatient substance abuse treatment organizations in a large state. Practice techniques and organizational culture were measured with adapted scales (Ball, et al., 2002; TCU-SOF, 2005). Practice techniques included practices associated with Cognitive Behavioral Therapy (CBT) and a traditional 12-Step treatment approach. Latent profile analysis (LPA) was conducted to identify practice profiles. Random effects regression was conducted to assess associations between organizational culture and practice profiles.

Findings: Treatment counselors had three practice classes: weak CBT/mild 12-Step (class 1), moderate CBT/weak 12- Step (class 2), and strong CBT/moderate 12- Step (class 3). Class 1 comprised the smallest percentage of the sample (12%). The majority of the sample (53%) made up the strong CBT/moderate 12 step class. The strong CBT/moderate 12-Step practice profile was more likely than the weak CBT/mild 12-Step profile in more outcome-focused organizations. However, practice profiles were not associated with the degree to which an organization opened treatment sessions to review.

Implications: Understanding the patterns of practitioners' simultaneous implementation of evidence-based and traditional practices can help implementation scientists to be more proactive in promoting EBP. Practitioners may not stop using traditional practices completely when starting to implement EBP. The profiles imply, however, that stronger implementation of EBP likely diminishes the use of traditional practices. Organizations emphasizing service outcomes are more likely to successfully promote the implementation of EBP.

This study was supported by a grant from the Substance Abuse Policy Research Program of the Robert Wood Johnson Foundation.

2B. INFORMING QUALITY IMPROVEMENT

Room: Glen Echo

Session: Individual Oral Presentations

Chair: Christopher Gordon, PhD, National Institute of Mental Health

IMPROVING PATIENT DECISION-MAKING AND ACCESS TO KIDNEY TRANSPLANT: A REGIONAL EXPLORE TRANSPLANT DISSEMINATION & IMPLEMENTATION PROJECT

Session: Individual Oral Presentation (2B)

Primary Contact/Presenter:

Amy D. Waterman, PhD
Associate Professor of Medicine
Washington University School of Medicine
GMS, Campus Box 8005
660 South Euclid Avenue, Mailstop 90-31-661
Saint Louis, MO 63108
Tel: 314-454-8102
amywaterman@wustl.edu

Co-authors:

Christina J. Goalby, MSW; Emily Herrington, MPH; Shelley Hyland, MA, Washington University School of Medicine; Katrina Dinkel, MA, Heartland Kidney Network

Problem: Kidney patients who are able to get transplants can gain 6-14 additional years of life compared to remaining on dialysis. While dialysis centers are mandated to provide transplant education, most have insufficient training in transplant and lack patient educational resources. Funded by Health Resources and Services Administration (HRSA), we partnered with a quality improvement organization (ESRD Network 12) to conduct a four-state initiative to improve dialysis providers' ability to educate about transplant and willingness to disseminate transplant education to patients.

Methods: In 2009, we conducted 11 Dialysis Provider Trainings for 300 providers representing 201 dialysis centers in Missouri, Kansas, Iowa, and Nebraska (76% of centers) to train them how to use an Explore Transplant (ET) video-based education program previously shown to increase dialysis patients' knowledge and pursuit of transplant. They also received 7 copies of patient transplant education materials for dissemination. Pre- and post-training and eight-month follow-up surveys assessed changes in providers' transplant knowledge and confidence educating, their plan for transplant education post-training, and their usage of ET eight months later.

Findings: Most attendees were nurses, social workers, or dialysis center administrators (36%, 28% and 25%, respectively). Among providers directly responsible for transplant education, prior to ET, few were having detailed discussions about living (15%) and deceased (12%) donation with 5 or more patients. The majority were verbally recommending patients be evaluated for transplant (85%), and referring patients to transplant centers for education (75%). After the training, providers' transplant knowledge (6 vs. 12 questions correct, $t=34.15$, $p<.001$) and confidence educating (23% vs 48%, $t=7.376$, $p<.001$) increased.

Enough transplant education materials were disseminated at the trainings to educate 1456 dialysis patients, about 34% of transplant candidates in Network 12. Eight months later, 70% of educators (n=129, 62% response rate) had educated at least 1 patient with 36% educating at least 5 patients. In total, respondents educated 939 patients using the program. Eight months later, more educators agreed that they had excellent transplant educational materials available (63% vs. 89%, $p<.001$) and more dialysis centers had a formal transplant education program in operation (23% vs 45%, $p<.001$).

IMPLEMENTATION IN RETAIL PHARMACIES: LESSONS FROM A STUDY OF FACTORS INFLUENCING IMPLEMENTATION OF AHRQ'S HEALTH LITERACY PHARMACY TOOLS

Session: Individual Oral Presentation (2B)

Primary Contact/Presenter:

Sarah J. Shoemaker, PhD, PharmD
Senior Associate
Abt Associates, Inc.
55 Wheeler Street
Cambridge, MA 02138
Tel: 617-349-2572
sarah_shoemaker@abtassoc.com

Objective: AHRQ developed health literacy tools for pharmacists to assess and improve their health literacy practices. This study aimed to understand the facilitators and barriers to the implementation of AHRQ's tools and pharmacies' implementation experiences to ultimately inform future pharmacy quality improvement efforts.

Methods: We conducted a comparative case study of eight heterogeneous retail pharmacies, guided by Rogers's Diffusion of Innovations model. Data were collected from interviews, site visits, and documents, and analyzed using a cross-case analytic approach.

Results: Facilitators to implementation in the retail pharmacies included leadership support, qualified staff and supervision, available change champions, ability to adapt the tool to their pharmacy, and receipt of technical assistance. Barriers to implementation included limited support from leadership, prioritization of other pharmacy activities (e.g., patient care), lack of qualified or available staff, and the burdensomeness of the tool. A key finding from the research concerned the role that colleges of pharmacy can play in addressing health literacy practices in pharmacies and that AHRQs tools were found to be well-designed to support that role – this finding led to the creation of curricular modules.

Conclusion: Future health literacy or quality improvement interventions should be adapted to the unique environment of pharmacies with attention to making them more feasible, trialable, and easy to incorporate within retail pharmacies' workflow and business model (i.e., dispensing, counseling, patient care services, immunizations).

Contribution to the D&I Field: Pharmacists are increasingly-recognized as members of the health care team and partners in delivering interventions to address key public health and prevention issues (e.g., immunizations, rapid HIV testing, cholesterol screening, etc.). Similarly, there are over 60,000 retail pharmacies in the United States. While pharmacies have been all but missing from the D&I field, given their increasing role in health care delivery, understanding implementation in pharmacies is critical to advancing the D&I field to comprise all sectors of health care delivery.

Financial support for this study was provided by the Agency for Healthcare Research and Quality (AHRQ) contract No. HHSA290 2006 00011I, TO#5.

IMPACT OF FOUR TYPES OF STATE INCENTIVES ON MEDICAID MENTAL HEALTH CLINIC DECISION TO PARTICIPATE IN A LARGE STATE CQI INITIATIVE

Session: Individual Oral Presentation (2B)

Primary Contact/Presenter:

Molly Finnerty, MD
Director, Bureau of Evidence Based Services
and Implementation Science (EBSIS)
New York State Office of Mental Health (NYSOMH)
1051 Riverside Drive, Unit 100
New York, NY 10040
Tel: 212-740-7789
molly.finnerty@omh.ny.gov

Co-authors:

Emily Leckman-Westin, PhD, EBSIS/NYSOMH; Edith Kealey, MSW, EBSIS/NYSOMH/NYSPI;
Kimberly Hoagwood, PhD, Center for Information Technology and Evaluation Research (CITER)/NYSOMH,
Columbia University; Jennifer Wisdom, PhD, CITER/NYSOMH, Columbia University

Objective: States often lead EBP implementation initiatives, and have the challenge of trying to bring these practices to scale. We examine the impact of different levels of State-sponsored incentives on clinic leadership decision to participate in a large CQI initiative to improve prescribing practices.

Methods: A total of 459 mental health clinic programs were offered the opportunity to participate in a PSYCKES CQI project in New York State over two years and under four different incentive conditions: 1) technical assistance (TA) alone (n=86 clinics), 2) fiscal incentive (n=156 clinics), 3) fiscal incentives in the presence of additional LGU contract requirements to conduct a CQI project (n=153 clinics), and 4) required participation (n=64 clinics). All participating programs were offered TA and PSYCKES, a web-based application providing access to Medicaid data to support clinical decision making and quality improvement. The fiscal incentive was a 7% increase in clinic Medicaid payment. Logistic regression models were used to evaluate the likelihood of participation due to incentive type (compared to technical assistance alone). Clinic characteristics related to fit between the project and the clinic were also examined (whether clinic serves children, size and percent of Medicaid population, medical leadership, performance at baseline).

Findings: Participation was 44.2% among clinics offered TA alone, followed in ascending order by clinics offered fiscal incentives (85.9% participated; OR 7.7, 95%CI:4.1–14.3,), clinics offered fiscal incentives with concurrent LGU CQI requirements (86.9% participated; OR: 8.4, 95%CI:4.4–15.8), and clinics where participation was required (98.4% participated; OR: 79.5, 95%CI:10.5-600.1). Other explanatory factors, like fit of the clinic program population to the initiative and leadership, will be discussed.

Conclusion: Type of state incentive offered influences participation decision for Medicaid providers in a large scale quality improvement initiative.

Funding: New York State Office of Mental Health, NIMH P30 MH090322-01 (Hoagwood-PI); NIMH R01 MH086237-01 (Wisdom-PI)

2C. IMPROVING DIABETES CARE

Room: Forest Glen

Session: Individual Oral Presentations

Chair: Christine Hunter, PhD, National Institute of Diabetes and Digestive and Kidney Diseases

IMPLEMENTATION AS BEHAVIOR: USING ORGANIZATIONAL AND INDIVIDUAL THEORIES OF BEHAVIOR TO PREDICT EVIDENCE-BASED DIABETES CARE IN THE UNITED KINGDOM

Session: Individual Oral Presentation (2C)

Primary Contact/Presenter:

Justin Presseau, PhD
Research Associate
Institute of Health and Society
Newcastle University
Baddiley-Clark Building
Richardson Road
Newcastle Upon Tyne, NE2 4AX
UK
Tel: +44 (0)191 222 3544
justin.presseau@ncl.ac.uk

Co-authors:

Marie Johnston, PhD; Jill J Francis, PhD, University of Aberdeen; Marko Elovainio, PhD, National Institute for Health and Welfare; Jeremy M Grimshaw, PhD, FRCGP, University of Ottawa; Susan Hrisos, MPhil; Nick Steen, PhD; Elaine Stamp, MSc; Margaret Hunter; Martin P Eccles, MD, FMedSci, FRCP, FRCGP, FFPHM, Newcastle University; Gillian Hawthorne, MRCP, PhD, FRCP, Newcastle Hospitals NHS Trust

Background: Implementing evidence into routine care often requires clinicians to change their behavior. Identifying factors that predict evidence-based behavior may provide a basis for designing interventions to promote quality healthcare. Two theoretical perspectives dominate the literature on influences on clinical behavior. The organizational perspective focuses on environmental factors including team climate, organizational justice and organizational citizenship. The individual perspective focuses on personal factors informed by theories including social cognitive theory, theory of planned behavior, learning theory and planning. These perspectives are rarely considered together, across the same clinicians, or for multiple behaviors. This research aimed to investigate how effectively and consistently factors from organizational and individual theories predict multiple evidence-based clinical behaviors within the same sample of clinicians in the context of primary care diabetes management.

Methods: Family practitioners and nurses (n=427) from 99 primary care practices in the UK completed postal questionnaires at baseline (including measures of theoretical constructs) for six evidence-based behaviors: prescribing (to reduce blood pressure and for glycemic control), advising (about weight, self-management and general education) and examining feet. Outcomes included simulated behavior (responses to patient scenarios) and self-reported behavior 12 months later.

Findings: Across behaviors, constructs from individual theories accounted for small and medium amounts of variance (respectively) in simulated behavior (median across behaviors R2adj=.05, range = .00 to .15) and self-reported behavior (median across behaviors R2adj=.15, range= .07 to .49). Intention/proximal goals, self-efficacy, and habit predicted all behaviors. Predictive constructs from organizational theories were procedural justice, and support for innovation and vision, which had small associations with one of the six behaviors.

Advancement: Constructs from individual-level theories consistently predicted multiple evidence-based clinical behaviors; constructs from organizational-level theories did not. Considering implementation as behavior has identified theories of behavior that can be used to understand and promote quality diabetes care.

Funding: Diabetes UK

EVALUATION OF THE DVD AS A NOVEL APPROACH TO DELIVERY OF LIFESTYLE INTERVENTION FOR DIABETES PREVENTION

Session: Individual Oral Presentation (2C)

Primary Contact/Presenter:

M. Kaye Kramer, RN, MPH, DrPH, CCRC
Assistant Professor , Department of Epidemiology
Director, Diabetes Prevention Support Center
GSPH, University of Pittsburgh
3512 Fifth Avenue, 3rd floor
Pittsburgh, PA 15213
Tel: 412-383-1680
mkk3@pitt.edu

Introduction: Lifestyle intervention is important for diabetes prevention. Effective options for delivery are currently being investigated as it is likely that the "best" mode of delivery will vary by setting and individual. This presentation describes the initial evaluation of the Group Lifestyle Balance (GLB) program, an adaptation of the Diabetes Prevention Program lifestyle intervention, delivered via DVD with remote telephonic support.

Methods: The goals of the GLB include a weight loss of 7% and a minimum activity goal of 150 minutes/week of moderate intense activity. A DVD of the 12-weekly GLB core sessions was created in collaboration with the US Air Force. The GLB-DVD was evaluated in both a primary care practice (PCP) and a worksite setting (WS). Individuals with pre-diabetes and/or the metabolic syndrome were enrolled in both settings. Participants viewed one DVD session each week and a trained prevention professional contacted each participant weekly via telephone to provide support. WS participants were also invited to attend monthly group meetings. Participants completed baseline and post-intervention assessments.

Results: A total of 22 (13 female, 9 male) and 30 (12 female, 18 male) participants completed the GLB-DVD at PCP and WS respectively. Mean weight loss following intention to treat analysis was -11.8 lbs (5.6%) in PCP and -11.5 lbs (5.5%) in WS. Significant decreases in HbA1c, waist circumference and BMI were noted in both settings, with significant decreases in total cholesterol, systolic and diastolic BP noted in PCP. A similar trend was noted for total cholesterol (0.07) in WS).

Conclusion: These results suggest that delivery of lifestyle intervention via DVD with remote telephone support was effective in reducing multiple risk factors for diabetes and cardiovascular disease. The GLB-DVD could be a useful tool in dissemination of lifestyle intervention within the community as an alternative to the group delivery setting.

Funding Sources: NIDDK and Department of Defense

IMPLEMENTATION OF A PRIVATE INTEGRATED CARE SETTING'S SUCCESSFUL DIABETES QI INITIATIVE IN SAFETY NET CLINICS: A PRACTICE-BASED RANDOMIZED TRIAL

Session: Individual Oral Presentation (2C)

Primary Contact/Presenter:

Rachel Gold, PhD, MPH
Assistant Investigator
Kaiser Permanente Center for Health Research
3800 N. Interstate Avenue
Portland, OR 97218
Tel: 503-528-3902
rachel.gold@kpchr.org

Co-authors:

John Muench, MD; Christina Milano, MD, OHSU Richmond; Chris Hill, MD; Ann Turner, MD, Virginia Garcia Memorial Health Center; Meena Mital, MD; Amit Shah, MD, Multnomah County Health Department; R. James Dudl, MD, Kaiser Permanente Care Management Institute; Jennifer E. DeVoe, DPhil, MD, OHSU Department of Family Medicine, OCHIN; Jon Puro, MPH-HA; Christine Nelson, PhD, RN, OCHIN

Introduction: Practice-based research is critical to evaluating the effective implementation of quality improvement (QI) strategies in diverse practice settings. We implemented a QI intervention, originally developed in a private care setting, in 12 Federally Qualified Health Centers (FQHCs), partnering with their practice-based research network (PBRN).

Methods: In this case study of researcher-clinician collaboration, we adapted / implemented a diabetes care QI initiative from Kaiser Permanente (KP) into 12 FQHCs. Our implementation trial uses a staggered randomized process; six 'early' FQHCs implement the intervention one year before six 'late' clinics. The QI initiative, developed in KP's (privately insured) integrated care setting, seeks to improve receipt of appropriate diabetes medications, using specially designed electronic medical record (EMR) tools. We describe: the collaborative, innovative process used to adapt the QI intervention to meet the needs and workflows of the participant FQHCs; our mixed-methods evaluation strategy; and the impact of the implemented intervention in its first six months, shown as the rates of patients with diabetes who receive the target medications.

Findings: Prior to implementation in the FQHC setting, the original QI tools (best practice alerts, panel support / management tools, provider / patient educational materials, staff training protocols) required substantial adaptation. The original and adapted tools, and learnings from the adaptation process, will be presented. Preliminary data on the impact of the QI initiative in the 'early' clinics, currently in development, will also be presented.

Impact: This study, the first randomized trial of this QI initiative, models innovative structures and processes, including collaboration with a PBRN, implementing a QI initiative in FQHCs with a single linked EMR, and clinic randomization. Our work advances D&I research by modeling a replicable process for researcher - FQHC clinician collaboration on a pragmatic implementation trial, and demonstrating the outcomes of this collaborative process.

Funding from the National Heart, Lung and Blood Institute, grant number 1R18HL095481-01A1.

2D. GLOBAL HEALTH

Room: White Flint Amphitheater

Session: Individual Oral Presentations

Chair: Kathleen Handley, PhD, Fogarty International Center, NIH

ASSESSING PROGRAM SUSTAINABILITY OF TWO COMMUNITY-BASED CHILD NUTRITION INTERVENTION PROGRAMS IN THE PERUVIAN RURAL HIGHLANDS

Session: Individual Oral Presentation (2D)

Primary Contact/Presenter:

Sunny S. Kim, BA, MPH
PhD candidate
Cornell University
502 Adam Avenue
Ithaca, NY 14850
Tel: 607-379-1919
ssk46@cornell.edu

Co-authors:

Hilary Creed-Kanashiro, MA; Rosario Bartolini, MA, Instituto de Investigación Nutricional, Lima, Peru; Mark A. Constas, PhD, Applied Economics and Management, Cornell University; Jean-Pierre Habicht; Rebecca J. Stoltzfus, Nutritional Sciences, Cornell University

Effective interventions should be sustained over time to achieve lasting impact on child growth and nutrition. Yet, there is a little empirical data on sustainability, particularly in developing country settings. We conducted a study in 21 communities of 2 highland regions in Peru, 2 years after project termination of 2 different intervention programs for reducing stunting, executed by ADRA-Peru (n=12) and CARE-Peru (n=9). ADRA's program focused on education and behavior change among caregivers, or the short routes to achieve impact. CARE's program focused on these short-route interventions and long routes or environmental factors such as local governance and coordination, income generation, and water and sanitation. Both programs were intended to be sustainable. Our aims were to determine (1) the extent and types of sustained activities and (2) their levels of sustainability. We measured sustainability by operationalizing the characteristics of routinization (resources, adaptations, values, and rules) and standardization (institutional standards). Each community received a 1-week visit for 2-hour semi-structured interviews with 4-6 program delivery actors (community health promoters, local health staff, community leaders, and municipality officials), to identify continued activities and their sustainability level. Focus groups were conducted with mothers with small children to triangulate the responses of program delivery actors. A total of 116 interviews and focus groups were transcribed, coded, and analyzed for each community. Evidence of any sustained activities was identified in only 4 ADRA and 4 CARE communities. Types of sustained activities included talks and mothers group meetings with health promoters and maintenance of the community water system. We conclude that few activities were sustained, their level of sustainability was weak, and none were institutionalized. Bringing a theoretical framework to sustainability was useful to this evaluation and potentially to design and implement programs of greater sustainability. This research was funded by the NIH and Cornell University.

DELIVERING SUSTAINABLE GLOBAL HEALTH INNOVATIONS AT SCALE: ESTIMATING DIFFUSION SYSTEM CAPACITY

Session: Individual Oral Presentation (2D)

Primary Contact/Presenter:

Lauren Kendall Krause, MD, MPH
PM
Kaiser Permanente Institute for Health Research
10065 E. Harvard Avenue
Denver, CO 80220
Tel: 303-614-1349
lauren.k.krause@kp.org

Co-authors:

Sarah Madrid, MA, ABD, PhD; James W. Dearing, PhD; Quynh A. Le, BS; Heather A. Nuanes, BA; Erica F. Morse, MA, Kaiser Permanente Institute for Health Research; Thomas E. Backer, PhD, Human Interaction Research Institute

A significant percentage of efficacious and cost-effective global health innovations fail to successfully scale-up to reach target populations; even fewer achieve sustained impact at scale. The processes of diffusion, scale-up, and spread are influenced by a number of inputs, including characteristics of the innovation itself, the context/environment, the potential adopters, and the inter-organizational partnerships created to deliver innovations ("diffusion systems"). Those factors associated with the success of diffusion systems in delivering global health innovations at scale have yet to be characterized.

We conducted multi-method research to identify those factors most highly associated with diffusion system readiness and capacity to deliver global health innovations at scale. Research inputs included: 1) a systematic review of the literature addressing how readiness and/or capacity have been conceptualized for diffusion systems (n=109 sources in final synthesis); 2) a review and analysis of existing decision aids designed to provide information about the capacity of organizations in global health diffusion systems (n=30); and 3) formative and benchmarking interviews with a broad sampling of global health stakeholders (n=71) regarding inter-organizational partnerships. From these results, we identified factors related to diffusion system readiness and capacity, as well as the success of inter-organizational partnerships to scale-up and spread global health innovations.

Through the three streams of research, factors (n=22) and variables (n=120) were identified in the following domains: innovation attributes and readiness for diffusion, population/health needs, country context, and internal and external attributes of organizations comprising a diffusion system. Systematic assessment and measurement of these factors during discovery, development, and delivery of global health innovations may improve the likelihood of successful and sustainable scale-up and spread.

Funding for this project is provided by the Family Health division of the Bill & Melinda Gates Foundation.

USING NETWORK-MAPPING TO EXAMINE INFORMATION DISSEMINATION AND IMPLEMENTATION WITHIN ETHIOPIA'S FAMILY PLANNING AND REPRODUCTIVE HEALTH SYSTEM

Session: Individual Oral Presentation (2D)

Primary Contact/Presenter:

Sarah V. Harlan, MPH
Program Officer
Johns Hopkins Center for Communication Programs (JHU•CCP)
111 Market Place, Suite 310
Baltimore, MD 21202
Tel: 919-599-7315
sharlan@jhuccp.org

Co-authors:

Tara M. Sullivan, PhD, MPH, JHU•CCP; Samson Estifanos, MD, MPH, PhD, Independent Research Consultant; Sisay Wagnew, Independent Research Consultant; Gashaw Mengistu, AIDS Resource Centre Coordinator

Introduction: Ethiopia's fertility rate is 4.8. One in 13 children dies in infancy, and the maternal mortality ratio is 673/100,000 live births. These poor indicators are due in part to inadequate systems for disseminating and exchanging information on family planning/reproductive health (FP/RH). The USAID-funded Knowledge for Health Project conducted qualitative research to identify: 1) key FP/RH actors; 2) barriers/opportunities for information exchange; and 3) ways to leverage networks and resources to implement evidence-based programs.

Methods: Researchers conducted a Network-Mapping exercise, along with interviews and focus group discussions, among 41 national, regional, and zonal/woreda health professionals. Participants were asked to identify FP/RH actors and discuss each actor's relative influence and role in facilitating or preventing information dissemination. They also discussed health information needs and challenges. Analysis involved Visualizer software, manual coding, and grouping by theme.

Findings: Over 100 FP/RH actors were identified. Most actors exchange information through the Ministry of Health, and information is often slow to diffuse. Information needs differ by level: National-level professionals need policy and strategy documents, while regional- and zonal/woreda-level professionals need more contextualized information. Challenges to accessing information include lack of functional networking and central repositories, inadequate technology, and bottlenecks created by information gatekeepers.

Contribution to D&I: This study highlights serious gaps in access to up-to-date FP/RH information throughout Ethiopia's health system. To close these gaps, a national knowledge translation strategy and an information dissemination system are needed. Together, these components should leverage intermediaries and include resources tailored to the local context. Strengthening FP/RH networks could improve dissemination and uptake of evidence and best practices.

This innovative and participatory methodology identified pathways for information dissemination and opportunities to shift "top-down" dissemination to a broader information exchange network. This low-cost, low-tech methodology will be useful for others working to strengthen dissemination and implementation in developing country settings.

External Funding: USAID Leader with Associate Cooperative Agreement Award: GPO-A-OO-08-00006-00

2E. CAN EMR-BASED CLINICAL DECISION SUPPORT IMPROVE CARE AND REDUCE HEALTH CARE COSTS? RESULTS FROM A GROUP RANDOMIZED TRIAL

Room: Brookside A

Session: Panel

Primary Contact/Chair:

Patrick J. O'Connor, MD, MPH
Senior Clinical Investigator
HealthPartners Research Foundation
2098 Juno Avenue
Saint Paul, MN 55116
Tel: 952-967-5034
patrick.j.oconnor@healthpartners.com

Panelists:

Patrick J. O'Connor, MD, MPH, HealthPartners Research Foundation
JoAnn Sperl-Hillen, MD, HealthPartners Research Foundation
William A. Rush, PhD, HealthPartners Research Foundation

Objective: Medical groups have invested billions of dollars in Electronic Medical Records (EMRs), but few studies have examined the cost-effectiveness of EMR-based clinical decision support (CDS). This study examined the cost-effectiveness of EMR-based CDS for adults with diabetes.

Data Sources/Setting: Clinical outcome and cost data from a randomized clinical trial of EMR-based CDS were used as inputs into a diabetes simulation model. The simulation cohort included 1,092 patients with diabetes with A1c above goal at baseline.

Study Design: The UKPDS Outcomes Model, a validated simulation model of diabetes, was used to evaluate remaining life years, quality adjusted life years (QALYs), and health care costs over patient lifetimes (40-year time horizon) from the health system perspective. Costs of diabetes related complications were estimated from the cost accounting system of a large health plan.

Principal Findings: Patients in the intervention group had significantly lowered A1c (.26%, p=.014) relative to patients in the control arm. Intervention costs were $94 per patient in the first year and $18 per patient in the following years. In the base case analysis, EMR-based CDS increased lifetime QALYs by 0.04 and reduced lifetime costs by $522. The cost-effectiveness of EMR-based CDS persisted in one-way, two way, and probabilistic sensitivity analyses.

Conclusions: Simulations showed that EMR-based CDS was related to increased quality of life and reduced costs for patients with diabetes. Widespread adoption of sophisticated point-of-care CDS has the potential to improve the quality of care for patients with chronic conditions while reducing costs to the health care system.

Presentation 1:

COST EFFECTIVENESS OF A SIMULATED PHYSICIAN LEARNING PROGRAM TO IMPROVE GLUCOSE CONTROL IN ADULTS WITH DIABETES

Authors: William A. Rush, PhD; Todd P. Gilmer, PhD; JoAnn M. Sperl-Hillen, MD; Patrick J. O'Connor, MD MPH; Paul E. Johnson, PhD; Gerald H. Amundson, BS; Stephen E. Asche, MA; Heidi L. Ekstrom, MA

Background and Objective: Individualized simulated learning interventions completed by primary care providers have resulted in improved blood sugars for patients with suboptimal glucose control. The aim of this study is to assess the cost-effectiveness of the simulated learning intervention.

Methods: Clinical outcome and cost data from a randomized clinical trial of simulated physician learning intervention were used as inputs into a validated simulation model of diabetes (the UKPDS Outcomes Model) to evaluate remaining life years, quality adjusted life years (QALYs), and health care costs over patient lifetimes (40-year time horizon) from the health system perspective. The simulation cohort included 1,403 patients with diabetes with glycosylated hemoglobin (A1c) >7% at baseline. Costs of diabetes related complications were estimated from the cost accounting system of a large health plan.

Findings: Patients in the intervention group had significantly lower A1c (-.19%, P=.034) relative to patients in the control arm. Intervention costs were $35 per patient in the first year and $14 per patient in the following years. In the base case analysis, the simulated learning intervention increased lifetime QALYs by 0.02 and reduced lifetime costs by $489. The cost-effectiveness of the intervention persisted in one-way, two-way, and probabilistic sensitivity analyses.

Conclusions: A simulated diabetes training program completed by primary providers in a large medical group was associated with increased quality of life and reduced costs. Dissemination of the simulated learning technology to other provider settings warrants consideration.

Presentation 2:

A SIMULATED DIABETES LEARNING INTERVENTION IMPROVES PROVIDER KNOWLEDGE AND CONFIDENCE IN MANAGING DIABETES

Authors: JoAnn Sperl-Hillen, Patrick O'Connor, Bill Rush, Steve Asche, Heidi Ekstrom, Omar Fernandes, Andew Rudge, Deepika Appana, Jerry Amundson, Paul Johnson

Background: Simulated learning experiences can overcome barriers to adequate provider training including limited work hours, reduced funding for faculty teaching, and limited exposure to longitudinal outpatient experiences.

Goal: To evaluate whether a simulated learning program can improve provider knowledge and self-confidence in diabetes management in primary care residents.

Methods: 19 primary care residency programs and 341 consented residents were randomized to (a) intervention (177 residents) or (b) control (164 residents) conditions. Intervention subjects were assigned 18 learning cases using a web-based simulation program teaching how to effectively and safely achieve blood sugar, blood pressure, and lipid goals. 92 intervention and 128 control subjects completed a post-intervention follow-up online survey with 10 multiple choice knowledge and 5 self-confidence assessment questions using a 5-point likert scale (1=not at all confident, 5=very confident). Mean (95% CI) knowledge test and self-confidence measures, adjusting for residency program clustering, were compared by group.

Findings: On knowledge testing, 46% of the intervention group answered more than half the answers correctly with mean score 5.31 (4.87-5.75), compared to 16% of the control group with mean score 4.1 (3.69-4.50), $p<.001$. Self-confidence measures were higher for intervention compared to control for: use of all available drug classes to manage diabetes (3.64 vs 3.09, $p<.001$), insulin use (4.12 vs. 3.36, $p<.001$), interpretation of blood sugars (4.21 vs. 3.58, $p< .001$), setting individualized treatment goals (4.06 vs. 3.42, $p< .001$), and overall confidence in managing diabetes (3.97 vs. 3.28, $p< .001$).

Conclusion: The simulated learning program was effective at improving knowledge and self-confidence for diabetes management in primary care residents. Through this NIH-translational study, geographically broad web-based dissemination of a standardized diabetes training program was demonstrated, with the potential to change provider practice patterns and lead to better adoption of evidence-based treatment approaches and improved patient outcomes.

2F. SHOW ME, DON'T TELL ME: THE USE OF BEHAVIORAL REHEARSAL AND STANDARDIZED PATIENT METHODS TO ENHANCE IMPLEMENTER SKILLS

Room: Brookside B

Session: Panel

Primary Contact/Chair:

Wendi Cross, PhD
Associate Professor of Psychiatry (Psychology)
and Pediatrics
University of Rochester Medical Center
300 Crittenden Boulevard
Rochester, NY 14642
Tel: 585-275-2005
wendi_cross@urmc.rochester.edu

Panelists:

Rinad Beidas, PhD, University of Pennsylvania
Shannon Dorsey, PhD, University of Washington
Wendi Cross, PhD, University of Rochester Medical Center

Problem: Evidence-based interventions (EBI) are available for a variety of problems, populations, and settings. Nevertheless, intervention effectiveness hinges upon the skill level of the people implementing them, making cost-effective training and supervision programs a critical focus for implementation science. Adult learning theory indicates that implementer skill development is most likely when active learning strategies, which include modeling and practice opportunities, are employed (Beidas and Kendall, 2010). In addition, behavioral rehearsal (BR; Cross et al., 2007) and standardized patient (SP) methods offers a more rigorous and objective means of assessing skill development and fidelity than commonly used strategies (e.g., implementer self report). Understanding how to use BR and SP strategies for cost-effective dissemination and implementation, and more rigorous evaluation, is an important emerging research focus.

Methods and Findings: Three presentations discuss investigations of BR and SP methods across a variety of EBI and implementers. Each will present development and implementation of these strategies, including audio/video examples, vignettes, and study outcomes. Study 1 is a randomized controlled training study of a cognitive-behavioral therapy for child anxiety. BR is used in clinician training and as a fidelity assessment tool with standardized youth patients. Study 2 involves using BR as an assessment tool for therapist fidelity to common elements in CBT treatment for child and adolescent depression, anxiety, trauma, and behavior problems. Study 3 is a randomized trial testing BR compared to training-as-usual in a suicide prevention program, using SP methods as an outcome assessment. The use of SP to certify clinicians in a treatment for depression will also be discussed.

Relevance to the field: Studies of BR and SP strategies are critical to improving implementer training and fidelity for a variety of EBI. Given the limitations of self-report methods, BR and SP also offer feasible, more rigorous methods for evaluation.

Presentation 1:

BEHAVIOR REHEARSAL AS A METHODOLOGY TO TRAIN AND ASSESS CLINICIANS IN COGNITIVE-BEHAVIORAL THERAPY FOR CHILD ANXIETY

Presenter: Rinad Beidas, PhD

Co-authors: Julie Edmunds, MA; Philip Kendall, PhD

Problem: Reviews of the literature suggest evidence regarding best training practices (see Beidas & Kendall, 2010; Herschell et al., 2010; Rakovshik & McManus, 2010). Typical training efforts include printed educational materials and/or one-time workshops emphasizing passive instruction (Herschell et al., 2004; Fixsen, Naoom, Blasé, Friedman, & Wallace, 2005). One-time didactic workshops are ineffective in changing therapist behavior (Beidas & Kendall, 2010). To change therapist behavior it may be critical to include active learning, a training modality that uses action and reflection with material. Behavioral rehearsal (BR), one type of active learning, includes strategies such as modeling, practice, and interaction between learners.

Quantitative Methods: BR was used in a randomized controlled training study (N = 115) to: a) train clinicians in cognitive-behavioral therapy for child anxiety (Coping Cat; Kendall & Hedtke, 2006) and b) to assess fidelity in trained clinicians (Beidas, Edmunds, Marcus, & Kendall, in review). BRs as part of training encouraged participants to role-play clinical skills with peer feedback (versus two other training conditions that did not include behavioral rehearsal); whereas BR as an assessment tool was used to assess participant fidelity in role-playing clinical skills with standardized youth patients.

Findings: With regard to aim 1, contrary to hypotheses, training emphasizing BR was not significantly more effective when compared to routine or computer-based training in changing therapist fidelity. With regard to aim 2, BR was successfully used as a sample of therapist behavior from which to independently rate therapist fidelity. Discussion of these findings will be augmented with multimedia presentation (e.g., audio, handouts of behavioral rehearsal vignettes) and pragmatic advice on how to use BR in study design.

Relevance to the DI field: This talk will review how others can use BR as a training and assessment tool, two important advances for the DI field.

Primary source of funding: This research was supported by F31 MH083333

Presentation 2:

USING BEHAVIORAL REHEARSAL TO ASSESS COGNITIVE BEHAVIORAL THERAPY COMPETENCIES AND STRATEGIES

Presenter: Shannon Dorsey, PhD

Co-authors: Rinad Beidas; Julia Cox; Nathaniel Jungbluth; Aaron Lyon

Problem: Recent research on usual care suggests that clinicians infrequently engage in behaviors that are consistent with cognitive behavioral therapy (CBT). Supplementing this research are studies that identify common elements of CBT, both general competencies (e.g., ability to explain CBT framework, homework assignment/ review) and specific strategies for particular disorders (e.g., exposure, behavioral activation). Research is needed that rigorously tests whether clinician training and consultation improves clinician fidelity and skill in both CBT competencies and strategies.

Method: Behavioral rehearsal (BR) was used to supplement the evaluation of a common elements-based statewide, state-funded CBT training. BR vignettes targeted clinicians' competencies and strategies for treating child and adolescent depression, anxiety, trauma, and behavior problems. Clinicians received 3 days of active, experiential training and six months of biweekly consultation. Clinicians were invited to participate in a study that involved assessing fidelity to a common elements CBT approach (i.e., competencies and strategies) using BR at pre-training, post-training, and post-consultation (N = 39), and were randomized to one of three BR scenarios at each assessment point. Three BR vignettes were constructed based on consultation with child treatment experts to allow independent raters to assess clinician fidelity.

Findings: Findings focus on BR feasibility, given limited evaluation resources, and on changes in clinician fidelity pre-training to post-training, with attention to any differences in improved fidelity for common competencies compared to specific strategies. Volunteer undergraduate standardized patients demonstrated acceptable levels of reliability (> 80%) across the three vignettes. Compared to prior online survey-only evaluations, enrollment rates were lower (40% vs. 58%); however, given the minimal incentive ($10) enrollment suggests that BR is feasible. Discussion will include decision points and challenges in developing, standardizing and using BR when assessing competencies and skills across a range of clinical conditions.

Funding: Washington State Department Behavior Health and Recovery & Evidence-based Practice Institute; NIMH-R25 MH080916-01A12 & Quality Enhancement Research Initiative (QUERI), Veterans Affair

Presentation 3:

THE IMPACT OF BEHAVIORAL REHEARSAL ON SUICIDE PREVENTION SKILLS ASSESSED BY STANDARDIZED PATIENT INTERACTIONS

Presenter: Wendi Cross, PhD

Co-authors: David Seaburn; Danette Gibbs; Karen Schmeelk-Cone; Ann Marie White; Eric D. Caine

Problem: Gatekeeper training is a broadly disseminated suicide prevention strategy. Although the goal is to develop skills to intervene with at-risk youth, community targeted prevention programs do not employ active learning strategies. We conducted a randomized trial to compare gatekeeper training as usual (TAU; n = 75) to training plus brief behavioral rehearsal (T+BR; n = 72) on a variety of learning outcomes, including standardized patient (SP) interactions.

Method: The Question, Persuade, Refer (QPR; Quinnett, 1995) program was tested with school-based community members. Participants in T+ BR engaged in small group BR practice. Immediately after training and at follow-up, participants were assessed for skills using SP methodology – a "distressed youth" portrayed by a trained actor—videotaped for skill ratings. At 3-month follow-up, participants were videotaped interacting with a different actor and script matched for difficulty.

Findings: The Observational Rating Scale-Gatekeeper Skills scale was used to rate participants' skills (Cross et al., 2010). Participants in the T+BR condition scored significantly higher than those in the TAU condition on Total Skills score ($F(1,127) = 6.25$, $p<.05$). Examination of domains showed a significant effect for condition on General Communication ($F(1,126) = 16.31$, $p<.001$) and a trend for Asking about Suicide ($F(1,127) = 3.05$, $p=.08$). There was also a main effect for time for the Total Gatekeeper Skills score ($F(1,127) = 11.18$, $p <.001$). Follow-up scores were significantly lower than post-test scores. There was not a significant interaction of condition by time in any analysis.

Conclusion: Active learning strategies enhanced observed gatekeeper skills. Skills deteriorated over time for participants in both training groups, although the behavioral rehearsal group maintained better overall skills. Videotaped SP examples and BR scenarios will be presented.

Relevance to the field: Studies of BR and SP strategies are critical to implementation science and improving intervention outcomes.

Funding: NIMH: K23MH073615; K23MH07615-03S1; MH071897 (PI: Caine); NIMH-R25 MH080916-01A12 & Quality Enhancement Research Initiative (QUERI), Veterans Affair.

2G. SYSTEMS SCIENCE METHODOLOGIES: INVOLVING STAKEHOLDERS TO ENHANCE DISSEMINATION AND IMPLEMENTATION RESEARCH

Room: Grand Ballroom (Salons A-D)
Session: Panel

Primary Contact/Chair:

Helen I. Meissner, PhD
Senior Advisor
Office of Behavioral and Social Sciences Research
Office of the Director
National Institutes of Health
31 Center Drive
Building 31/Room B1C19
Bethesda, MD 20892-2027
Tel: 301-594-2105
meissneh@od.nih.gov

Panelists:

Kristen Hassmiller Lich, PhD, University of North Carolina Chapel Hill
Patricia L. Mabry, PhD, Office of Behavioral and Social Sciences Research, NIH
Jessica Burke, PhD and Richard Garland, MSW, University of Pittsburgh
Jennifer Watling Neal, PhD, Michigan State University

Presentation 1:

OVERVIEW OF SYSTEMS SCIENCE METHODS FOR DISSEMINATION AND IMPLEMENTATION RESEARCH

Presenter: Kristen Hassmiller Lich, PhD

Systems science (SS) methodologies are analytic approaches that have been developed to understand connections between a system's structure and its behavior over time. Many such methodologies exist including (but not limited to), agent-based modeling (ABM), microsimulation, System Dynamics (SD) modeling, social network analysis (SNA), discrete event analysis, Markov modeling, many operations research and engineering methods, and a variety of other modeling and simulation approaches. SS approaches have not been widely applied to the health areas of behavioral and social science research, but show great promise, including for application in dissemination and implementation research. This panel will introduce SS methodologies and will showcase three examples where SS has been used to advance dissemination/implementation research: 1) PRISM (Prevention Impacts Simulation Model) – an SD simulation model designed to evaluate the individual and combined impact of various policy options on morbidity, mortality, and cost associated with chronic disease in a local context; 2) an ABM developed to address the key determinants of crime in a local community and to support investigation of practical and community-supported crime intervention programs; and 3) an SNA designed to leverage knowledge about the structure and function of teachers' professional social networks to maximize intervention effects and inform intervention design. We focus on these specific examples, as they illustrate the common ability of SS methods to engage community partners and other stakeholders in learning and decision-making. Following the presentations, the panel will engage audience members in a discussion about the potential role of SS methods in dissemination and implementation research.

Presentation 2:

USING SYSTEM DYNAMICS TO INFORM COMMUNITY LEVEL POLICY DECISIONS: AN EXAMPLE USING PRISM

Presenters: Patricia L. Mabry, PhD; Diane Orenstein, PhD

Co-author: Diane Orenstein, PhD, Applied Research and Evaluation Branch, CDC

The Centers for Disease Control and Prevention (CDC) and the National Heart Lung and Blood Institute (NHLBI), with assistance from the Office of Behavioral and Social Sciences Research (OBSSR), funded the development of the *PRevention Impacts Simulation Model* (PRISM). The model began as a system dynamics model designed to aid a local community in identifying the most effective and least expensive policy options for reducing first time cardiovascular events. It was developed by modelers and subject matter experts in consultation with local stakeholders. The model incorporated local demographic data, community preferences regarding policy options, and simulated the plausible 30 year impact of policy and environmental interventions on future trajectories of chronic disease outcomes and related economic expenditures. The results capture the likely temporal dynamics of future population prevalence of first time cardiovascular events under each competing policy scenario along with costs. The model has been expanded from its original purpose and now includes 34 policy interventions and six primary health outcomes. The diseases and conditions modeled in detail include heart disease, stroke, diabetes, hypertension, high cholesterol, and obesity. The model also accounts for diseases related to smoking, obesity, poor nutrition, and physical inactivity. Last, the model has been transformed from a "paper' model to an interactive web-based tool. In this presentation we will give an overview of the model's development, with the goal of demonstrating how system dynamics models work in general. In addition, we will explain the rationale for including stakeholders in model development. The outputs of the model will be described in the context of how they can be used to inform policy implementation, with emphasis on the application and use by over 50 communities. Finally, the potential for systems dynamics modeling to further the science of dissemination and implementation will be discussed.

Presentation 3:

AGENT BASED MODELING: AN INNOVATIVE TOOL FOR INCORPORATING STAKEHOLDER INPUT AND INFORMING CONTEXT SPECIFIC AND COST EFFECTIVE COMMUNITY CRIME PREVENTION MODELS

Presenters: Jessica Burke, PhD; Michael Yonas, DrPH; Shawn Brown, PhD; Jeffrey Borrebach, BS; Richard Garland, MSW; Donald Burke, MD; and John Grefenstette, PhD

Co-authors: Michael Yonas, DrPH; Shawn Brown, PhD; Jeffrey Borrebach, BS; Donald Burke, MD; and John Grefenstette, PhD, University of Pittsburgh

Agent-based models have emerged as an innovative tool for exploring public health intervention options and for increasing the likelihood that interventions are adopted in practice. In this project, an interdisciplinary team of individuals with backgrounds in community health, intervention development, translational research, computational modeling, and violence partnered to develop a formative agent-based model (ABM) to explore the effectiveness of community-based interventions to reduce community crime and promote informal social control. The team developed an ABM where agents representing individual residents interact on a two-dimensional grid representing a neighborhood. As part of the process they drew upon published literature and existing longitudinal data to identify and operationalize the key behaviors and factors impacting those behaviors. Juvenile

agents are assigned initial random probabilities of perpetrating a crime (e.g., graffiti) and adults are assigned random probabilities of witnessing and reporting crimes. The agents' behavioral probabilities modify over time depending upon exposure to other agents' crime perpetration and/or crime reporting behaviors. ANOVA, paired t-tests and cost-benefit ratios were used to assess the impact of activating different percentages of adults to increase reporting and to reduce community crime activity. The model suggests that global and targeted interventions to reduce community crime were effective in reducing overall offenses. While targeted interventions may have an increased impact on reducing crimes committed by targeted offenders, such interventions were shown to consistently move/defer crime to nearby neighborhood settings. Global interventions produced consistent and neighborhood-wide and sustained crime offense reductions. The ABM allows for the efficient investigation of a problem and intervention approaches that otherwise would be costly and time intensive. The project illustrates how such models might be used to investigate practical and community-supported intervention programs, and how ABM is a useful tool for implementation research and the integration of research findings and evidence-based interventions to inform practice.

Presentation 4:

USING SOCIAL NETWORK ANALYSIS TO INFORM THE DISSEMINATION AND IMPLEMENTATION OF INTERVENTIONS

Presenters: Jennifer Watling Neal, PhD

Co-authors: Zachary P. Neal, PhD; Giannina Fehler-Cabral, PhD; Patricia Farrell, PhD; Patricia Farrell, PhD, Michigan State University; Marc S. Atkins, PhD; David B. Henry, University of Illinois at Chicago; Stacy L. Frazier, PhD, Florida International University

Social network analysis is a unique approach to research that provides information about the entire structure of actors' relationships in a particular setting as well as information about how individual actors are positioned within this structure. In this presentation, we highlight some of the unique ways that social network analysis can be used to inform the dissemination and implementation of interventions. First, we will provide a brief introduction to social network analysis, focusing on how this relational approach to research differs from more traditional attribute-based approaches. Second, we will discuss how two social network mechanisms – cohesion and structural similarity – influence the use of new interventions. Specifically, we will examine these mechanisms using data on the advice networks and weekly use of new classroom practices of 29 teachers in three elementary schools participating in the *Links to Learning* project, an intervention aimed at improving children's disruptive behaviors. Results suggest that intervention use spreads among teachers with similar patterns of advice-giving relationships (i.e., structural similarity) rather than from teachers who are sources of advice (i.e., cohesion). These findings have implications for detecting influential community members who may be recruited as collaborators in dissemination processes. Finally, using data collected on the advice networks of 85 teachers in three elementary schools participating in the *Promoting Academic Success Project* (an intervention aimed at improving educational outcomes for minority boys), we will briefly discuss how social network data can be used to provide feedback to stakeholders about barriers to dissemination and strategies to improve community capacity.

2H. BIRDS EYE VIEW: CHOICES AND CHALLENGES AROUND IMPLEMENTATION SCIENCE IN NATIONAL EVALUATIONS

Room: White Oak B

Session: Panel

Primary Contact/Co-chair:

Lauren Supplee, PhD
Administration for Children and Families
370 L'Enfant Promenade SW, 7th Floor West
Washington, DC 20447
Tel: 202-401-5434
lauren.supplee@acf.hhs.gov

Co-chair:

Molly Irwin, PhD, MPH, Administration for Children and Families

Panelists:

Virginia Knox, PhD, MDRC
Chrishana M. Lloyd, PhD, MDRC
Alan Werner, PhD, Abt Associates

Problem: Recently the federal government has been making large investments in evidence-based policy and research to inform it. Concurrent with these investments has been a recognition of the importance of understanding intervention implementation to: contextualize impact results, understand how implementation is related to impacts, and examine the efficacy of implementation factors. Efforts to understand these issues raises challenging questions such as: How do we use theory to guide data collection and analysis when the field is still developing theory? How should large scale studies set priorities for data collection when resources are limited, but still capture the complexity of implementation at scale? What are the critical implementation data elements we need? Can these large national trials play a unique role in advancing implementation science by addressing particular implementation questions?

The panel will use three national efficacy and effectiveness trials with complex implementation studies as a framework for discuss and shedding light on these issues.

Methods: Three large national evaluations funded by the Administration for Children and Families include rich mixed-method, multi-informant implementation data at multiple contextual levels. The panel presentation will include researchers from the Head Start CARES project, a national group-randomized trial of three social-emotional promotion programs; the Mother and Infant Home Visiting Program Evaluation (MIHOPE), a national evaluation of the new federal home visiting initiative; and Health Professions Opportunity Grants Evaluation, a large-scale examination of new demonstration projects to provide low-income individuals with training and employment opportunities in the health care field.

Findings: The panelists will present the studies to frame and contextualize the aforementioned issue, and will lead the audience in a discussion addressing the questions posed above.

How Presentation Advances the Field: This presentation provides an opportunity to discuss how several large federal studies are being designed, and how implementation is being conceptualized and measured and to solicit the audience's views on how these types of implementation studies can best be used to advance the D&I field.

Source of Funding: Administration for Children and Families

HEAD START CARES

The Head Start CARES demonstration is a national group randomized trial of three different social-emotional promotion programs. The programs selected (Incredible Years Classroom Management, Preschool PATHS and Tools of the Mind) had training/technical assistance available to grantees and have shown efficacy at a small scale with Head Start or other low-income preschool populations.

Head Start CARES includes 17 grantees, 104 Head Start centers around the country with 307 classrooms, 614 teachers and teaching assistants, and 3,927 three- and four-year-old children. The project has already collected a rich set of quantitative and qualitative implementation data, and follow-up data collection in the children's kindergarten year will be collected in the Spring of 2012.

Implementation data from the demonstration is currently being analyzed and will help to shed light on the efficacy of the programs when scaled broadly, including: the characteristics of Head Start settings that have the potential to led to effective implementation, and factors related to training, coaching, and technical assistance that may facilitate successful implementation and fidelity of the programs.

The research team will discuss their thoughts around prioritizing implementation constructs and analyses, including how best to capture the complexity of the implementation processes, and how to prioritize implementation constructs and analyses.

Funding: Administration for Children and Families

MIHOPE

The Mother and Infant Home Visiting Program Evaluation (MIHOPE) is a Congressionally mandated evaluation of the new Maternal, Infant and Early Childhood Home Visiting Program (MIECHV). MIECHV is one of the first federal programs which reserves the majority of funding for home visiting models that demonstrate evidence of effectiveness. The MIHOPE evaluation will be examining the impact of the MIECHV program and how the impacts vary by subgroups and features of home visiting programs. The study plans to include 12 states, 85 local sites and approximately 5100 pregnant women or families with young infants. The design of MIHOPE includes a complex logic model demonstrating the multiple interactions between community context, participants, providers, organizational operations and training and technical assistance supports. The design includes a rich set of mixed-

method implementation data collection to yield information and lessons about operating evidence-based home visiting programs and the challenges faced and addressed during implementation and throughout the operation of the program. The MIHOPE study is uniquely situated to quantitatively explore variations in program impact by program implementation features. The presentation will highlight the complexities and trade off considered in designing and executing this rich implementation data collection across a project of this scope.

Funding: Administration for Children and Families and Health Resources and Services Administration

THE HEALTH PROFESSION OPPORTUNITY GRANTS (HPOG) EVALUATION

The Health Profession Opportunity Grant program funds demonstration projects to provide low-income individuals with opportunities for education, training and advancement that lead to jobs that pay well and address the healthcare professions' workforce needs by focusing on sectors expected to either experience labor shortages or have high demand. In FY 2010, $67M in grant awards were made to 32 entities located across 23 states, including five Tribal organizations. These demonstration projects are intended to address two pervasive and growing problems: the increasing shortfall in supply of healthcare professionals in the face of expanding demand; and the increasing requirement for a post-secondary education to secure a job with a living wage for families. ACF is utilizing a multi-pronged evaluation strategy to assess the success of the HPOG demonstration projects. All of the components include some focus on implementation, and one component has implementation research as its central focus. Currently under design, the National Systems, Implementation and Outcomes evaluation is intended to be universal to all grantees and seeks to understand: how the training programs are being implemented across the grantee sites; what changes to the service delivery system are associated with program implementation; and how implementation and system characteristics are associated with individual level outputs and outcomes.

Funding: Administration for Children and Families and Health Resources and Services Administration

Concurrent Session 3 Abstracts

Concurrent Session 3 Abstracts
March 19, 2012
3:30 – 5:00 p.m.

3A. ASSESSING ORGANIZATIONAL CHANGE

Room: White Flint Amphitheater

Session: Individual Oral Presentations

Chair: Cherry Lowman, PhD, National Institute of Alcohol Abuse and Alcoholism

IMPLEMENTATION OF NEW CLINICAL SERVICES: PARADIGM SHIFTS AND PRACTICAL ADJUSTMENTS

Session: Individual Oral Presentation (3A)

Primary Contact:

Alison Hamilton, PhD, MPH
Research Health Scientist
VA Greater Los Angeles Healthcare System
11301 Wilshire Blvd (210A)
Desert Pacific MIRECC
Los Angeles, CA 90073
Tel: 310-570-7411
alisonh@ucla.edu

Presenter:

Matthew Chinman, PhD, VA Pittsburgh & RAND

Co-authors:

Alison B. Hamilton, PhD, MPH; Alexander S. Young, MD, MSHS, VA Greater Los Angeles & UCLA; Rebecca Oberman, MSW, MPH; Amy N. Cohen, PhD, VA Greater Los Angeles

Objective: The VA mental health system is hiring "Peer Support Technicians" or PSTs—individuals in recovery from serious mental illness hired as clinical team members. VA PSTs draw upon their lived experiences to share 'been there' empathy, insights, and skills, serve as role models, inculcate hope, engage patients in treatment, and help patients access community supports. PSTs have been shown to improve patient outcomes, and are now required by VA. Yet studies in and out of VA document significant barriers to deploying PSTs on clinical teams. We will describe results of our qualitative evaluation with clinical teams that incorporated PSTs.

Methods: Using an organizational change model (the Simpson Transfer Model), deployment of PSTs was collaboratively planned with three case management teams in the PEER (PEers Enhancing Recovery) project. Approximately 12 months after the PSTs had become part of the teams, semi-structured interviews (n=23; approx. 8 per site) were conducted with the PSTs, clinic supervisors, clinical staff, patients, and PEER research staff. Interviews were recorded and transcribed. Constant comparison methodology was used to compare salient topics within and across roles and sites, yielding an understanding of implementation challenges and successes, and local contextual factors.

Results: Participants described the PSTs' addition as generally positive, but involved many "growing pains" related to establishing trust, boundaries, and role delineations. Anticipated concerns about PST-patient boundary violations were not realized, in part because of considerable pre-planning of the PSTs' role. Sites struggled with how to best use some of the PSTs and how much structure to place on them, at times leading to underutilization of PSTs. However, all agreed that PSTs connected well with patients and patients reported feeling supported by PSTs during everyday tasks.

Conclusion: Introducing new staff on existing clinical teams presents challenges. Organization change strategies helped to mitigate against many anticipated concerns, but ongoing adjustments are still required. The strategies used with PSTs could be a model for rolling out new interventions and staff in existing clinical operations.

USING ORGANIZATIONAL READINESS DATA TO TAILOR IMPLEMENTATION STRATEGIES TO LOCAL CONTEXTS

Session: Individual Oral Presentation (3A)

Primary Contact/Presenter:

Alison Hamilton, PhD, MPH
Research Health Scientist
VA Greater Los Angeles
11301 Wilshire Boulevard (210A)
Los Angeles, CA 90073
Tel: 310-570-7411
alisonh@ucla.edu

Co-authors:

Amy N. Cohen, PhD; Nikki Armstrong, PhD; Alexander S. Young, MD, MSHS, VA Greater Los Angeles & UCLA

Introduction: Interventions designed to facilitate adoption of evidence-based practices (EBPs) require a thorough understanding of organizational readiness for change. Data on organizational readiness can facilitate implementation by providing information on organizational strengths and deficiencies and indicating which areas necessitate concentrated implementation strategies.

Methods: Data are drawn from EQUIP (Enhancing Quality in Psychosis), which had the goals of increasing use of targeted EBPs (Supported Employment and weight management) for individuals with schizophrenia. EQUIP was a site-level controlled trial at 8 VA medical centers (four intervention, four control). This presentation focuses on the use of readiness data to tailor implementation strategies. Staff completed the Organizational Readiness for Change (ORC) measure pre- (n=43) and post-implementation (n=54), and key stakeholders were interviewed at pre- (n=38), mid- (n=22), and post-implementation (n=33).

Results: Overall, intervention sites were moderately ready to change according to the ORC. The readiness domains of training needs, communication, and change had lower mean scores (i.e., potential deficiencies), while staff attributes of growth and adaptability had higher mean scores (i.e., potential strengths). General readiness data was triangulated with baseline qualitative data specific to the targeted EBPs. Two of the four sites required implementation strategies to promote uptake of pre-existing targeted EBPs, while the other two sites required implementation strategies to support further development of the targeted EBPs. Sites that had barriers to increased uptake (e.g., limited capacity) did not have substantial changes in utilization of the targeted EBPs from baseline to follow-up. In contrast, the site with the greatest need for development of the targeted EBP had the highest degree of change in utilization from baseline to follow-up.

Conclusions: Motivation for change, organizational climate, staff perceptions and beliefs, and prior experience with change efforts contribute to readiness for change at mental health clinics. The site that required development of their EBPs saw the greatest increase in their utilization rates, perhaps because implementation strategies could optimize new care processes.

Funding source: Department of Veterans Affairs

USING TWO DISTINCT INTRA-CLASS CORRELATION COEFFICIENTS TO ASSESS INTER-RATER RELIABILITY AND AGREEMENT: IMPLICATIONS FOR ORGANIZATIONAL MEASURES

Session: Individual Oral Presentation (3A)

Primary Contact/Presenter:

Christian D. Helfrich, MPH, PhD
Implementation Research Coordinator
VA Puget Sound Healthcare
1100 Olive Way
Seattle, WA 98115
Tel: 206-277-1655
christian.helfrich@va.gov

Co-authors:

P. Adam Kelly, PhD, Tulane University, New Orleans; Ina M. Gylys-Colwell , Northwest HSR&D Center of Excellence, VA Puget Sound Healthcare System, Seattle; Patricia M Dubbert, PhD, South Central VA Mental Illness Research, Education and Clinical Center (MIRECC), and South Central VA Geriatric Research Education and Clinical Center (GRECC); Dean Blevins, PhD, Centers for Disease Control and Prevention, Atlanta

Problem: There is widespread interest in measuring organizational factors, such as culture and readiness to change. However, survey data of organizational constructs are often combined without assessing inter-rater reliability (IRR). Poor IRR can indicate problems with construct validity, scale reliability, or both. IRR should be assessed with two distinct intra-class correlation coefficients (ICCs): ICC1, the proportion of variance attributable to the organization overall, and ICC2, the reliability of the mean score at a given site within the organization. We illustrate each ICC and its interpretation using findings from a psychometric validation study of the Organizational Readiness to Change Assessment (ORCA).

Methods: We combined data from three implementation studies in the Veterans Health Administration testing interventions to increase use of different clinical practices. In each study, two ORCA scales were fielded (Evidence and Context) among individuals involved in implementation. We used hierarchical modeling to calculate ICC1, and derived ICC2 using the Spearman-Brown equation.

Findings: For the Evidence scale, we had a total of 95 observations from 42 organizations, and for the Context scale, 105 observations from 41 organizations. ICC1s for the aggregated data were .32 for Evidence and .27 for Context (i.e., 32% and 27% of the variance in Evidence and Context scores, respectively, were attributable to the organization). ICC2s were .52 and .48 for Evidence and Context (i.e., 52% and 48% consistency, respectively, in the mean scores). Based on the observed ICC1s, we estimated a minimum of 11 observations per organization would have been needed to achieve ICC2s >=.80.

Implications: ICC1s exceeded conventional thresholds (typically .08 - .20), which supports the construct validity of the instrument at the organizational-level. However, ICC2s did not meet minimum thresholds (typically .70-.80), indicating that we could not reliably estimate mean scores at the site-level. Therefore samples sizes adequate for computing ICC1, or what is commonly referred to as the "ICC", are likely insufficient for assessing site-level mean score reliability. This measurement issue is widely applicable to other organizational measures.

This research was supported by the VA Health Services Research & Development Service, grant IIR 09-067.

3B. MEASURING READINESS, COST AND CAPABILITY FOR IMPLEMENTATION

Room: Glen Echo

Session: Individual Oral Presentations

Chair: Elizabeth Neilson, MSN, MPH, Office of Disease Prevention, NIH

IMPLEMENTING EVIDENCE-BASED INTERVENTIONS IN LOW-WAGE WORKPLACES: MEASURING EMPLOYERS' READINESS AND CAPACITY

Session: Individual Oral Presentation (3B)

Primary Contact/Presenter:

Peggy A. Hannon, PhD, MPH
Assistant Professor
University of Washington
1107 NE 45th Street, Suite 200
Seattle, WA 98105
Tel: 206-616-7859
peggyh@uw.edu

Co-authors:

Kristen Hammerback, MA; Cate Clegg-Thorp, MPH; Jeffrey R. Harris, MD, MPH, MBA, University of Washington

Introduction: Employers in low-wage industries have the potential to reach employed adults and their dependents with evidence-based interventions (EBIs). National surveys show that employers' EBI implementation is low; interventions to disseminate EBIs to low-wage employers have had mixed success. Several dissemination and implementation frameworks highlight the importance of readiness-to-change and capacity for implementation success, but valid measures of these constructs are scarce, particularly for workplaces. We conducted the present research to develop workplace-specific measures of readiness and capacity.

Methods: We used a mixed-methods approach. First, we conducted five focus groups with employers in low-wage industries (N=34). Focus groups were coded and analyzed to identify the prominent themes characterizing employers' readiness and capacity to implement EBIs. Second, using these findings, we developed a survey questionnaire and administered it to a national random sample of employers in low-wage industries (N=279). Survey questions assessed the workplace's general capacity for change, EBI-specific capacity, EBI readiness-to-change, and current EBI implementation.

Findings: Focus groups revealed that most employers in these industries viewed workers' health as important and saw promoting workers' health as appropriate for the workplace, yet they reported low EBI implementation. The employers reported significant gaps in capacity, including limited budgets and lack of staff time. The survey results converged with the focus-group findings, in that respondents reported limited readiness, capacity (for example, only 25% of worksites reported having a wellness budget), and implementation (on average, worksites had fully or partially implemented only 36% of the EBIs we assessed). Both readiness and capacity correlated strongly with EBI implementation (.45 and .59 respectively; $p < .01$).

Conclusion: This research advances dissemination and implementation research by creating workplace-specific measures of readiness and capacity, critical constructs in dissemination and implementation frameworks. The next step will be validating these measures by testing whether they predict implementation change over time.

Primary funding: This research was supported by a grant from the National Cancer Institute, 1R21CA136435-01A1.

COST OF IMPLEMENTING NEW STRATEGIES (COINS)
Session: Individual Oral Presentation (3B)

Primary Contact/Presenter:
Lisa Saldana, PhD
Research Scientist
Center for Research to Practice
12 Shelton McMurphey Boulevard
Eugene, OR 97401
Tel: 541-343-3793 ext. 120
lisas@cr2p.org

Co-authors:
Patricia Chamberlain, PhD, Center for Research to Practice and Oregon Social Learning Center;
W. David Bradford, PhD, University of Georgia; Mark Campbell, MA, Center for Research to Practice

Problem: When decision makers consider implementation of a new practice they must weigh the costs of delivering that practice along with the costs associated with going through the implementation process. Although leading theories and frameworks include conceptualization of implementation process costs as an important factor, such costs are an understudied aspect of implementation science.

Method: A strategy for measuring the cost of implementation processes over and above the cost of the intervention is described in the context of a randomized controlled trial of 53 sites invited to implement Multidimensional Treatment Foster Care (MTFC), an evidence-based alternative to congregate care for youth. Counties were randomized to: (1) Community Development Teams (CDT: experimental) where sites participate in peer-to-peer networks and move through implementation together in consultation with a purveyor or (2) individual implementation (IND: "as usual") where sites work individually with the purveyor. Implementation procedures were operationalized and costed across conditions using a standardized methodology based on the Stages of Implementation Completion (SIC). Resource structures for each implementation condition were examined, followed by an implementation cost-effectiveness analysis in relation to the number of youth served.

Findings: Differences in cost structures (i.e., the when and how much for resource allocation) were identified between the implementation conditions despite the same intervention model being adopted. Differences occurred primarily during the pre-implementation phase. Patterns of resource allocation were identified; although some implementation activities were less expensive for one strategy than the other (e.g., Readiness Planning IND = $2,500; CDT = $8,700), the less expensive strategy might require more effort (e.g., IND = 206 hours; CDT = 154 hours). Preliminary data support the cost-effectiveness of the CDT over IND condition with regard to the number of youth served. Both the methodology and outcomes inform decision makers and advance knowledge of resource considerations for implementation.

Funding: NIMH; NIDA

PRACTICE TRANSFORMATION IN PRIMARY CARE: THE IMPACT OF PRACTICE FACILITATION AND LOCAL LEARNING COLLABORATIVES ON CHANGE PRIORITY, CAPABILITY, AND CONTENT

Session: Individual Oral Presentation (3B)

Primary Contact:

Paula Darby Lipman, PhD
Senior Study Director
Westat
1650 Research Boulevard
Rockville, MD 20850
Tel: 301-279-4555
paulalipman@westat.com

Presenter:

Margot R. Krauss, MD, Westat

Co-authors:

Paula Darby Lipman, PhD; Rachel A. Cohen, MPH, Westat; Cheryl B. Aspy, PhD, University of Oklahoma Health Sciences Center; James W. Mold, MD, MPH, University of Oklahoma Health Sciences Center

Introduction: Three components of system level improvement (priority for improving care, change process capability, and care process content) and a set of change strategies have been identified by Solberg as important for system level change. A 2 x 2 factorial (four-arm), mixed-method, randomized, controlled trial (RCT) was conducted in two practice-based research networks (PBRNs) in Oklahoma (OKPRN) and New York (UNYNet) to examine the impact of three interventions (practice facilitation, local learning collaboratives, or both) on implementation of six specific asthma guidelines compared to performance feedback and academic detailing alone. This sub-study examines whether the interventions measurably impact the three change components and use of the key strategies proposed by Solberg.

Research methods: Prior to the intervention period, all enrolled staff completed the Change Process Capability Questionnaire (CPCQ) which measured priority for change, change process capability (organizational factors including history of change, plans for organizational refinement, and ability to initiate and sustain change priority) and strategies used for implementing asthma guidelines. These same instruments were administered post-intervention to measure whether practice facilitation and/or LLCs had an impact on these key process measures.

Findings: 45 primary care practices were enrolled in the study (24 in Oklahoma and 21 in New York), and 442 CPCQ surveys were completed at baseline. Between baseline and post-intervention data collection, 18% (79) staff members left their practices; and 96% (348) of remaining staff completed post-intervention questionnaires. There were no statistically significant differences at baseline in priority score, change process capacity, or strategies by study arm. Preliminary analyses currently underway address the impact of each intervention on CPCQ change components. Documented changes in key process measures would provide evidence for use of certain interventions to assist small clinics in improving implementation of practice guidelines. Complete data and analyses will be available by the time of the conference.

Funding Source: NIH - 1R01HL091827-01A2 PI: Mold

3C. CHILD HEALTH

Room: Forest Glen
Session: Individual Oral Presentations
Chair: Peyton Purcell, MPH, National Cancer Institute

THE ELUSIVE RELATIONSHIP BETWEEN IMPLEMENTER FIDELITY AND CLINICAL OUTCOMES: METHODS AND MEASUREMENT

Session: Individual Oral Presentation (3C)

Primary Contact/Presenter:

Wendi Cross, PhD
Associate Professor
University of Rochester Medical Center
300 Crittenden Boulevard
Rochester, NY 14534
Tel: 585-275-2005
wendi_cross@urmc.rochester.edu

Co-authors:

Jennifer West, PhD; Peter Wyman, PhD; Karen Schmeelk-Cone, PhD; Yinglin Xia, PhD; Michael Teisl, PhD; Xin Tu, PhD, University of Rochester Medical Center

Problem: The literature is mixed regarding the relationship between fidelity and outcomes. This may be because objective measures are not used, psychometric properties are not established, and/or assessment of one sample of the intervention is insufficient. We present: 1) the development and psychometric properties of implementer fidelity measures based on observational ratings collected over 4 years of an RCT of a school-based program for at-risk children delivered by paraprofessional; 2) multiple assessments of child-interventionist interactions; 3) the relationship between fidelity scores and clinical outcomes.

Method: Implementer-child sessions were recorded and coded for fidelity conceptualized as: a) Adherence to the manual, b) Competence in program delivery. 204 video-taped implementer-child sessions were objectively coded for Adherence and Competence (n=76 dyads). Because data are nested (i.e., children are nested within implementers, and session number within dyads) multi-level modeling was conducted using 2 random effects (implementer; child) adjusted for several fixed effects (child age, gender, implementer years experience, session, baseline aggression scores, observed child 'behavioral challenge'). Multisource 6-month outcome data included: child, teacher, and parent reports.

Findings: For Competence, random effects in the model associated with the implementer accounted for 68% of the variance and child within implementer effects were non-significant. For Adherence, 41% of variance of scores was explained by implementer; child within implementer was not significant. Significant fixed effects were: child gender,

child challenge, session number. SEM modeling assessed the relationship between fidelity and 6-month outcomes. Latent variables were created within child controlling for baseline and age. Implementer fidelity was significantly related to decreases in externalizing symptoms measured by child and parent, and decreased internalizing and behavior dysfunction per parent report.

Conclusion: Rigorous methods and measurement of implementer fidelity across multiple observations are as important as measuring outcomes for accurate conclusions about interventions, and avoid Type III errors.

Funding Sources: NIMH: K23MH073615; K23MH07615-03S1; R01MH068423; NIMH-R25 MH080916-01A12 & Quality Enhancement Research Initiative (QUERI), Veterans Affair.

IMPLEMENTING INTERVENTIONS TO IMPROVE RESPIRATORY HEALTH IN HEAD START PROGRAMS

Session: Individual Oral Presentation (3C)

Primary Contact:

Kristin Riekert, PhD
Associate Professor
Johns Hopkins School of Medicine
JHAAC 4B.72
5501 Hopkins Bayview Circle
Baltimore, MD 21224
Tel: 410-550-7755
kriekert@jhmi.edu

Presenter:

Michelle N. Eakin, PhD, Johns Hopkins School of Medicine

Introduction: Efficacious interventions to improve children's respiratory health have been developed including: education programs, Breathmobile, and motivational interviewing (MI). The challenge lies in implementing them to high-risk low-resource communities. This panel will present results from three trials targeting respiratory health for children enrolled in Head Start (HS) and will highlight challenges faced and lessons learned.

Method: For all three studies, participants were parents of children enrolled in Baltimore City HS. **A+HS** was a train-the trainer model that taught HS staff to provide asthma education and case management. **Breathmobile+FACI** offered mobile asthma care at HS locations and parent training in family-doctor communication about asthma. **PRIDE** targets reducing children's exposure to secondhand smoke using MI. A+HS and BM+FACI required the child to be diagnosed with asthma while PRIDE required the child to live with 1+ smokers.

Results: **A+HS** (N=447 children): 96% of staff completed the asthma training and passed a post-training assessment. Asthma action plan availability at intervention sites increased from 8% to 49% and asthma management barriers plans increased from 0% to 24%. There were no treatment effects on asthma morbidity. **Breathmobile+FACI** (N=321 children): only 18% of children attended Breathmobile and 65% completed FACI visits. There was a slight increase in symptom-free days at 6-months in the Breathmobile+FACI group otherwise there were no group differences on other morbidity indicators. **PRIDE** (ongoing): 28% of the 7749 children screened live with a smoker; only 13% consented to participate and 26% have completed all intervention sessions. Outcomes include home nicotine and child salivary cotinine levels.

Conclusions: These studies demonstrate the challenges of implementing efficacious interventions to high-risk communities including: limited community resources to deliver interventions, low-uptake of interventions by the targeted population, and competing psychosocial demands that prevent family engagement. How lessons learned are being integrated into a newly funded study will be discussed.

VALIDITY OF A SELF-ASSESSMENT TOOL TO MEASURE PHYSICAL ACTIVITY & WATER IN SCHOOL-AGE PROGRAMS

Session: Individual Oral Presentation (3C)

Primary Contact/Presenter:

Rebekka M. Lee, ScM
Research Coordinator/Doctoral Student
Harvard School of Public Health
Department of Society, Human Development, & Health
677 Huntington Avenue, 7th Floor
Boston, MA 02115
Tel: 617-384-5457
rlee@hsph.harvard.edu

Co-authors:

Karen M. Emmons, PhD; Cassandra A. Okechukwu, ScD, MSN/MPH; Jessica L. Barrett, MPH; Erica L. Kenney, MPH; Angie L. Cradock, MS, ScD; Catherine M. Giles, MPH; Madeleine E. deBlois, MS; Steven L. Gortmaker, PhD, Harvard School of Public Health, Department of Society, Human Development, and Health

Problem: Childhood obesity has rapidly increased over the past two decades. Many impactful interventions for improving physical activity and nutrition have aimed at creating environmental changes in schools and afterschool programs. While situating interventions in these settings has proved effective, measurement of intervention effects can be time-consuming and costly, especially as initiatives are scaled up for optimal population impact. The objective of this study is to determine if a simple, low-cost observational measure completed by existing program staff can accurately assess afterschool physical activity and water offerings.

Methods: Data were collected as part of a group-randomized trial in 20 Boston afterschool programs. Study staff designed and pilot-tested a 25-item observational self-assessment tool. On 5 days within each site, site directors completed the self-assessment, while trained observers recorded data on snacks served and obtained accelerometer data on a subset of children. Structured observations were conducted on 2 days to assess physical activity participation. Correlations were calculated to validate weekly average estimates from site directors' assessments compared to objectively assessed water and physical activity data.

Findings: Site directors' reports of serving water (N=20) were significantly correlated with observations by trained data collectors($r=0.75, p<0.01$). Reported physical activity participation levels were correlated with estimates of the proportion of children participating in moderate and vigorous physical activity (MVPA) via structured observations($r=0.45, p=0.05$). Meanwhile, self-assessment of offering 30 minutes of physical activity to all children had a positive correlation with accelerometer estimates of average minutes of MVPA($r=0.35, p=0.13$).

Discussion: This study highlights the usefulness of brief, low-cost program self-assessment measures to the dissemination and implementation process. This tool will help researchers and practitioners, especially those with low resources, gain an accurate assessment of program environments and target specific areas for improvement as they scale up obesity prevention initiatives.

This research was supported by the Donald and Sue Pritzker Nutrition and Fitness Initiative, Centers for Disease Control and Prevention (Prevention Research Centers Grant U48DP001946 and U48DP000064).

3D. THE CROSSROADS OF RESEARCH AND POLICY

Room: White Oak A

Session: Individual Oral Presentations

Chair: Catherine Stoney, PhD, National Heart, Lung and Blood Institute

TRANSLATION AT THE CROSSROADS OF RESEARCH AND POLICY: WHERE DO POLICYMAKERS SEEK EVIDENCE AND WHAT ARE THEY LOOKING FOR?

Session: Individual Oral Presentation (3D)

Primary Contact/Presenter:

Elizabeth Dodson, PhD, MPH
Research Assistant Professor
Washington University in St. Louis
660 S. Euclid Avenue
Campus Box 8109
St. Louis, MO 63112
Tel: 314-362-9652
edodson@wustl.edu

Co-authors:

Nora Geary, BA; Ross Brownson, PhD, Washington University in St. Louis

Objective/introduction: Policy change can be a powerful mechanism for the promotion and protection of public health. However, policymakers' use of research varies and is poorly understood by researchers. This study sought to enhance understanding of state policymakers' preferences regarding type and source of research, definitions of what constitutes scientific evidence, and suggestions for ways that researchers can improve dissemination of research to policymakers to enhance its usefulness.

Methods: Semi-structured, key informant interviews were conducted by telephone with 25 state legislators who served on health committees in 12 states with high cancer mortality. Interviews were conducted between July 2010 and January 2011, recorded, and transcribed verbatim. Focused coding qualitative data analysis was used to analyze the transcripts. All interviews were double coded to ensure reliability.

Findings: Policymakers reported their most trusted sources of information to include health care professionals, colleagues with health knowledge, local health departments, the National Conference of State Legislatures, and industry. Many noted a preference for research presented in brief formats highlighting local data and including cost data where possible. While policymakers believe universities could be good sources of scientific information, they report being unsure about how to access it and suggest that researchers make them aware of relevant and timely information. Many policymakers exhibited an accurate understanding of what scientific evidence is, but some were less certain and one mentioned never having thought it was necessary for policymaking.

How research advances the field of D&I: This work enhances researchers' understanding of the challenges of disseminating research to policymakers and provides insight into where policymakers go to find research, how they prefer to receive it, and what they find most helpful when considering policy action. These findings can improve translation of evidence-based information at the critical crossroads between research and policy.

Funding acknowledgement: This work was supported by the National Cancer Institute at the National Institutes of Health (grant number 1R01CA124404-01) and Cooperative Agreement Number U48/DP001903 from the Centers for Disease Control and Prevention, Prevention Research Centers Program.

PUSHING USEFUL SCIENCE TO HEALTH SYSTEM MANAGERS AND POLICYMAKERS

Session: Individual Oral Presentation (3D)

Primary Contact/Presenter:

Moriah Ellen, PhD
Post-doctoral fellow
McMaster University
1280 Main Street West
CRL-209 (PPD/CHEPA)
Hamilton, ON L8S 4K1
Tel: 416-256-4450
moriah.ellen@gmail.com

Co-authors:

Michael Wilson, PhD; John N. Lavis, MD, PhD; R. Brian Haynes, MD, PhD; Parminder Raina, PhD, McMaster University, Hamilton, Ontario; Jeremy Grimshaw, MBChB, PhD, Ottawa Health Research Institute, Ottawa, ON, Canada; Mathieu Ouimet, PhD, Universite Laval, Quebec, QC, Canada; Russell Gruen, MBBS, PhD, Monash University, North Melbourne, VIC, Australia

Objective: Health system managers and policymakers need timely access to high quality, policy relevant systematic reviews that are retrievable using policymaker friendly terminology and written in ways that highlight what they need to know to make decisions about health systems. Our objectives were to obtain health system managers' and policymakers' views about different approaches for developing user-friendly summaries of systematic reviews.

Methods: We conducted semi-structured interviews with 18 managers and policymakers working in federal and provincial governments, regional health authorities and hospitals across Canada to obtain feedback on three examples of summaries. During the interviews we asked which of the approaches they found helpful, what specific aspects were helpful, and ideas for improving upon current efforts to summarize systematic reviews. All interviews were taped and transcribed and N-Vivo was used for data management. We used the constant comparative method for analysis to identify themes emerging from each successive wave of four to five interviews.

Principal Findings: Our interviews identified that majority of the respondents preferred summaries that were presented in a clear, concise, and helpful way, even if the summary was long. Many respondents stated that they: i) preferred key messages and findings up front, ii) would like details regarding background, methods, and applicability if they wish to read more than the key messages, iii) appreciate quality ratings but would like some perspective on the rating, and iv) prefer bullets and tables to paragraphs.

Source of funding: Canadian Institute for Health Research

AT THE CROSSROADS OF RESEARCH & PRACTICE: A STATE AGENCY–UNIVERSITY PARTNERSHIP FOR TRANSLATIONAL RESEARCH AND DISSEMINATION OF EBPs

Session: Individual Oral Presentation (3D)

Primary Contact/Presenter:

Brian K. Bumbarger, MEd
Director, EPISCenter
Penn State University
Prevention Research Center
206 Towers Building
University Park, PA 16802
Tel: 814-863-2568
bkb10@psu.edu

Co-Author:

Elizabeth Morey Campbell, PhD, Prevention Research Center, Penn State University

Current research on dissemination and implementation is at an historic crossroads. Our knowledge of which interventions "work" has increased tremendously, but hasn't yet translated into significant population public health improvement. Because communities operate within systems and regulatory contexts most-often organized at the state level, efforts to move research to practice will have greater public health impact if they can be organized at the state-level rather than community-by-community. To do so requires a particular model of, and infrastructure for, dissemination and implementation. This paper describes a decade-long partnership between the Prevention Research Center at Penn State University and the Pennsylvania Commission on Crime and Delinquency. This partnership has evolved into a multi-agency initiative supporting the dissemination and implementation of nearly 200 replications of evidence-based prevention and intervention programs, and a series of quasi-experimental and descriptive studies indicating a significant and sustained impact on both youth outcomes and more efficient utilization of system resources. We describe how the collaboration has evolved, and how it has developed into a sophisticated prevention support infrastructure; discuss the partnership and policy lessons learned throughout this journey; and identify remaining issues in promoting this type of state-level research–policy partnership. This research is supported through grants from the Pennsylvania Commission on Crime and Delinquency and the National Institute on Drug Abuse and published originally in *Administration and Policy and Mental Health and Mental Health Services Research* (Bumbarger & Campbell, 2011).

3E. SUSTAINABILITY RESEARCH

Room: White Oak B

Session: Individual Oral Presentations

Chair: Barry Portnoy, PhD, Office of Disease Prevention, NIH

SUSTAINABILITY OF EVIDENCE-BASED HEALTHCARE: RESEARCH AGENDA AND METHODS

Session: Individual Oral Presentation (3E)

Primary Contact/Presenter:

Enola Proctor, PhD
Professor
Washington University
One Brookings Drive
St. Louis, MO 63130
Tel: 314-935-6660
ekp@wustl.edu

Co-authors:

Curtis McMillen, PhD, University of Chicago; Doug Luke, PhD; Ross Brownson, PhD; Mary Ann Merz, PhD; Annaliese Calhoun, MA, Washington University in St. Louis

Problem: We do not know how well or when innovations are sustained once implemented. This project addresses three key issues, using concept mapping within the context of a national expert meeting: What issues are most important for advancing sustainability research? Which are most important? Which are most challenging for the field?

Methods: We employ concept mapping (CM) to elicit experts' recommendations for advancing sustainability research. CM methods enable disperse participants to identify and interpret group perceptions. Ranked and sorted recommendations are presented to a subset of experts in a 1 ½ day meeting to shape research agenda and identify methodological advances. Methods include: (1) identifying 80 participants from three stakeholder groups (researchers, funders, healthcare leaders) across three areas of health (public health, mental health, medicine) through literature reviews, searches of NIH grants, and queries to funders (NIH, foundation, and VA), CTSA research navigators; (2) inviting them to on-line brainstorming to generate CM statements; (3) inviting 50 experts to sort and rank statements to create clusters and (4) representing CM clusters in a CM map. Participants in a national agenda-setting meeting will interpret maps to generate a research agenda and methodology recommendations. Pattern matches will reflect stakeholder and health sector differences.

Findings: CM brainstorming began in October; structured CM processes ensure a map by early January; the early February expert meeting will use the map to develop an agenda and methodological recommendations. Findings will be ready by February 28. Early results suggest these recommendations: clearly defined thresholds for defining sustainability; innovative data sources (e.g., data from treatment disseminators); and non-linear methods to analyze and depict sustainability "curves" (e.g., flame out, crowd out, and ramp up).

Implications for advancing the field: Results will shape empirical study of sustainability; inform policy, practice, and training of health services researchers; and guide funding priorities.

Primary sources of funding: AHRQ R13 conference grant; Barnes-Jewish Foundation.

SUSTAINABILITY RESEARCH: WHAT ARE THE MEASURABLE OUTCOMES?

Session: Individual Oral Presentation (3E)

Primary Contact/Presenter:

Mary Ann Scheirer, PhD
Program Evaluator
Scheirer Consulting
238 Sayre Drive
Princeton, NJ 08540
Tel: 609-951-8686
maryann@scheirerconsulting.com

A broad agenda outlining methods needed for improved research on health program sustainability was recently co-written by the proposed presenter and published in the *American Journal of Public Health*. It emphasized that future research to understand sustainability must clearly specify the outcomes or dependent variables that are measured, in addition to continued research on factors that influence or predict the sustainability of interventions within the on-going health and health care systems.

This presentation will provide data from an RWJF-funded program, the New Jersey Health Initiatives, that conducted follow-up surveys about sustainability issues following the close-out of funding for 48 grantee projects in diverse content areas in community settings. Each project had received funding of $100,000 to $400,000 from RWJF over 2 to 4 years to start-up a health-related project. The web survey conducted 12 to 18 months after project close-out had an 83% response rate. These results document that the likelihood of sustainability can be substantially different for diverse sustainability outcomes: sustaining benefits for clients, continuing program activities after the initial funding ends, maintaining coalitions/partnerships over time, sustaining new structures/policies/procedures, and/or sustaining attention to the project's focus issue by continued dissemination of project materials and results. Overall, 87% of respondents reported sustaining at least one type of outcome from their project, even in the absence of formal training or other interventions to increase sustainability. Issues of program modifications, predictors of sustainability outcomes, and funding sources for program continuation will also be addressed.

The presentation of these unpublished results emphasizes that future research about sustainability should use contingency models to relate 1) underlying factors or interventions to increase the extent of sustainability to 2) specific types of sustainability outcomes, as well as to 3) the content areas addressed and 4) the characteristics/delivery structures of the programs and their activities.

WALKING THE WALK: PLANNING FOR INTERVENTION SUSTAINABILITY

Session: Individual Oral Presentation (3E)

Primary Contact:

Jessica Ameling, MPH
Sr. Research Assistant
Johns Hopkins University School of Medicine
2024 E. Monument Street
Suite 2-600
Baltimore, MD 21205
Tel: 410-558-0219 ext. 230
jamelin1@jhmi.edu

Presenter:

L. Ebony Boulware, MD, MPH, Johns Hopkins University School of Medicine

Co-authors:

Jessica Ameling, Lee Bone, David Levine, Sarah Flynn, LaPricia Boyer, Patti Ephraim, Jeffrey Barbers, Hanan Aboumatar, Mike Albert, Daniel Bitzel, Jeanne Charleston, Lisa Cooper, Peter Fagan, Stephanie Fitzpatrick, Annette Fisher, Kimberly Gudzune, Debra Hickman, Felicia Hill-Briggs, Miyong Kim, Noreen Krause, Destiny Martin, Richard Matens, Gary Noronha, Adelline Ntatin, Maria Prince, Leon Purnell, Tanjala Purnell, Debra Roter, Michelle Simmons, Jennifer Wolff, Hunter Young, L. Ebony Boulware

Problem: Across the US, urban community clinics have large populations of uncontrolled hypertensives. Best practices for translating sustainable educational-behavioral interventions into these clinics are unknown. We partnered with a community-based clinic serving 9,722 adult patients (86% African American), 21% of African American patients with hypertension (52% uncontrolled) to perform a randomized controlled trial studying the effectiveness and sustainability of educational-behavioral interventions to improve hypertension disparities among urban African Americans.

Methods: Building on our prior research demonstrating the efficacy of patient and community targeted educational-behavioral interventions to improve hypertension control, we investigated the sustainable translation of these interventions. We used Community-Based Participatory Research (CBPR) and the Practical, Robust, Implementation and Sustainability Model (PRISM) frameworks to conduct environmental assessments: (a) in-depth interviews with clinic medical directors, administrators, and healthcare payers (n=4); (b) roundtable discussion with clinic providers (n=10); (c) observation of clinic staff (n=5), and (d) patient (n=19) and family (n=12) focus groups. Community Advisory Board (CAB) members guided all phases of research. Prior to implementation, assessment findings helped tailor our proposed two-arm trial comparing a multi-faceted intervention to usual care. Quarterly stakeholder monitoring will inform necessary modifications.

Findings: Findings led to significant intervention changes, accommodating payer practices, clinic practices, and community and patient needs. Administrators and payers felt investigating intervention components individually, instead of bundled, would help establish a case for sustainability. Providers wanted to directly liaise with outreach workers. Clinic staff stressed integrating the intervention into existing practices. Focus groups highlighted important intervention targets. CAB members guided recruitment and continued community engagement. The tailored intervention now consists of a four-arm intervention that studies the incremental effectiveness of each component and integrates with clinic practices.

Conclusion: Use of CBPR and PRISM frameworks led to substantial study revisions, highlighting the importance of this type of assessment when designing potentially sustainable interventions.
Acknowledgement: This research was supported by a grant from the National Heart, Lung, and Blood Institute (P50HL0105187).

3F. IMPLEMENTATION OF EVIDENCE-BASED PRACTICE IN CHILD WELFARE: HOW DO WE TRAIN PROVIDERS, RETAIN STAKEHOLDERS, AND IMPROVE CASEWORKER REFERRALS?

Room: Brookside A
Session: Panel

Primary Contact/Chair:
Shannon Self-Brown, PhD
Associate Professor
Georgia State University
PO Box 3995
Atlanta, GA 30302
Tel: 404-413-1283
sselfbrown@gsu.edu

Discussant:
Daniel Whitaker, PhD, Georgia State University

Panelists:
Shannon Self-Brown, PhD, Georgia State University
Patti Chamberlain, PhD, Center for Research to Practice and Oregon Social Learning Center
Shannon Dorsey, PhD, University of Washington

Presentation 1:
A RANDOMIZED TRIAL OF TRAINER TRAINING FOR IMPLEMENTATION OF THE SAFECARE MODEL
Presenter: Shannon Self-Brown, PhD
Co-authors: Daniel Whitaker, Amanda Hodges, Erin McFry

Problem: Training trainers, rather than direct service providers, through a train-the-trainer (TTT) approach can accelerate implementation of evidence-based practices (EBP), especially in child welfare service systems where turnover rates can reach 50% annually. Very little is known regarding the most effective way to train EBP trainers, nor what the downstream impact is on trainee implementation/fidelity, or client outcomes.

Method: A statewide rollout in Georgia Child Welfare of SafeCare-- a home visiting program shown to be effective in reducing child neglect and physical abuse, began in 2009. Funding from the CDC allowed for a comparison of two TTT approaches in this roll-out. Outcomes of interest included trainee SafeCare implementation, certification, and fidelity, as well as family outcomes. Various individual and organizational characteristics of trainees were also examined to understand the influence on implementation outcomes, alone or in combination with the two training models. In total, 22 trainers were assigned to an enhanced or standard TTT condition, and these trainers trained 329 SafeCare providers across the state.

Findings: Preliminary data analyses indicate few differences between the two TTT approaches on trainee outcomes; however, individual and organizational characteristics of trainees did significantly influence initial implementation outcomes. Specifically, younger trainees scored higher on workshop quizzes, and trainees with

more work experience and higher role play scores were more likely to implement SafeCare with families, and achieve high initial fidelity. Of note, very few trainees (approximately 20%) implemented SafeCare and achieved certification due to systemic barriers including poor referral mechanisms and lack of reimbursement infrastructure for SafeCare services. Further exploration of how the TTT approaches impact long-term home visitor fidelity maintenance and family outcomes, and interactions between TTT conditions and service regions (which impacted referrals and service payment), is underway. Implications for future research examining large EBP roll-outs in child welfare settings will be discussed.

Funding: GA Department of Human Services, Centers for Disease Control and Prevention

Presentation 2:

MULTI-AGENT TURNOVER IN IMPLEMENTATION RESEARCH: CHALLENGES AND OUTCOMES

Presenter: Patti Chamberlain, PhD

Co-authors: Lisa Saldana; Courtenay Padgett

Problem: It is documented that therapist turnover is an issue in implementation efforts, with 20-50% annual turnover in community mental health clinics. However, implementation science efforts have begun to examine greater contextual issues related to program implementation including organizational and broader system contexts. Therefore, the inclusion of turnover in system leader and agency administrator positions is an understudied and critical factor in implementation research.

Method: Participants, including system leaders, agency administrators, and clinical providers were recruited into a two-arm randomized controlled implementation trial of 53 sites in California and Ohio. Counties were invited to implement Multidimensional Treatment Foster Care (MTFC), an evidence-based alternative to congregate care for youth, and were randomized to one of two implementation conditions: (1) Community Development Teams (CDT: experimental) or (2) individual implementation (IND: "as usual"). Twenty-six sites implemented MTFC to the degree of serving youth. Assessments examined baseline, pre-implementation, implementation, and sustainability. Counties that did not move past pre-implementation were tracked for 2 years; those that implemented were tracked for 3 years. Evaluations examined the relationship between when participant turnover occurred within counties and at what level (system leader, administrator, or provider) and how this influenced implementation behavior and success.

Findings: Although turnover occurred at all levels of participants, the degree of turnover differed by participant level. System leaders experienced 20%, agency administrators 3%, and clinical program supervisors 12% turnover. Lower than expected turnover rates were partially related to participation rates; when examining agency contact logs from implementing counties only, 27% of counties experienced agency administrator turnover and 38% experienced program supervisor turnover. Turnover at each level will be examined in relation to implementation progression and milestones such as successful program start-up. Outcomes will be discussed both in terms of implications for successful implementation and in terms of challenges of implementation research.

Funding: NIMH; NIDA

Presentation 3:

PROJECT FOCUS: TRAINING BROKERS OF EVIDENCE-BASED PRACTICES

Presenter: Shannon Dorsey, PhD

Co-authors: Suzanne Kerns; Eric Trupin; Kate L. Conover

Problem: The research to practice gap for Evidence-based Practices (EBP) is significant, with few children in community mental health receiving EBP. One commonly overlooked aspect of bridging this gap involves attention to brokers of mental health treatment (e.g., teachers, child welfare workers). Although substantial D&I efforts have focused on training providers in EBP, few efforts have focused on training brokers to identify mental health needs and make referrals to appropriate EBP.

Method: Four child welfare offices were randomized to either an Intervention or Waitlist Control Condition (WLC). Caseworkers serving youth in foster care were trained in the Project Focus broker model, which includes: 1) identifying primary mental health needs using standardized assessment measures; 2) matching need with available EBP in their community; and 3) referral to EBP and follow up. Caseworkers received 6 hours of in-person training and 4-months of biweekly consultation calls. Fifty-one caseworkers were enrolled in the trial (Intervention n = 24; WLC n = 27), completing measures pre-training and post-training/consultation.

Findings: Only 42% of the Intervention caseworkers participated in both training days, although all but one participated in at least one consultation call. On average, caseworkers received 5 hours of consultation (of 8 possible). Caseworkers reported high levels of satisfaction with the training, and particularly with the consultation. Intervention caseworkers were more likely to be aware of EBP ($F(1, 43) = 9.37$; $p < .01$) (Dorsey et al., in press). Intervention caseworkers did not demonstrate greater knowledge of appropriate EBP referrals or make more referrals to EBPs (lack of findings potentially related to small N, as some trends were evident). Dose of consultation played a role in findings. Implications for broker training to enhance D&I efforts of EBP are discussed. Presentation includes multimedia (audioclips of consultation calls).

Funding: Paul G. Allen Foundation; Washington Evidence-based Practice Institute

3G. INNOVATIVE SOCIAL NETWORK ANALYSIS IN DISSEMINATION AND IMPLEMENTATION RESEARCH

Room: Grand Ballroom (Salons A-D)

Session: Panel

Primary Contact/Chair:

C. Hendricks Brown, PhD
Professor
Miller School of Medicine
University of Miami
1425 NW 10th Avenue
Miami, FL 33133
Tel: 305-243-2529
chbrown@med.miami.edu

Panelists:

Thomas W. Valente, PhD, University of Southern California
Lawrence A. Palinkas, PhD, University of Southern California
C. Hendricks Brown, PhD, University of Miami

Presentation 1:

NETWORK INTERVENTIONS: A TAXONOMY OF BEHAVIOR CHANGE INTERVENTIONS FOR IMPLEMENTATION RESEARCH

Presenter: Thomas W. Valente, PhD

Problem: There is widespread recognition that behavior and organizational change programs should be implemented and/or delivered by members of the group undergoing the change. Social networks can be used to change individual behaviors, re-structure or re-organize intra- and inter-organizational relations, and/or accelerate the adoption of evidence based practices.

Method: This paper introduces a taxonomy of network interventions, the process of using social network data to accelerate or improve organizational performance. Four strategies are introduced: (1) identification of individuals; (2) network segmentation, (3) induction; and (4) network alteration. Each strategy has multiple tactical alternatives. Some tactics have multiple operational algorithms. Consequently, researchers have multiple intervention choices at their disposal. We describe how to select the appropriate network intervention depending on the availability and character of network data, perceived characteristics of the behavior, its existing prevalence, and the social context of the program. We close with a discussion of the prospects for network interventions to advance network science and implementation research.

Funding: NIAAA and NIDA

Presentation 2:

MEASUREMENT OF IMPLEMENTATION PROCESS: THE STRUCTURED INTERVIEW OF EVIDENCE USE (SIEU) AND CULTURAL EXCHANGE INVENTORY (CEI)

Presenter: Lawrence A. Palinkas, PhD

Co-authors: Antonio R. Garcia, Gregory A. Aarons, Ian Holloway, Megan Finno, Dahlia Fuentes, Patricia Chamberlain

Problem: Two critical components of evidence based practice (EBP) implementation process are interactions among key stakeholders and use of research evidence. However, there are no existing reliable and valid instruments to measure these two components. This paper describes the development of two instruments designed to measure the interactions among implementation stakeholders and how research evidence is acquired, evaluated and applied in implementation decisions.

Methods: Items for the SIEU were obtained from a focus group of 8 child welfare directors and semi-structured interviews of 54 child welfare, mental health and juvenile justice agency directors in 40 California and 11 Ohio counties participating in a randomized controlled trial of Community Development Teams (CDT) to scale up an EBP for youth behavior disorders. Items for the CEI were obtained from coding videotaped interactions among directors of agencies in the same county, agencies in different counties, treatment developers, and intermediary organization representatives at 4 CDT meetings. These instruments were then administered to 142 systems leaders in a web-based survey.

Findings: We identified three domains of evidence use: (1) (source of research evidence (2) assessment of evidence validity, reliability and relevance; and (3) application of evidence in implementation decisions; one domain for cultural exchange (i.e., process and outcome of cultural exchange among implementation stakeholders). Factor loadings were moderate to large and internal consistency reliabilities ranged from .74 to .86 for the three domains of the SIEU and .92 for the CEI. Convergence of these factors with evidence-based practice attitudes and organizational culture and climate was small to moderate suggesting that the newly identified factors represent distinct dimensions of implementation process and outcomes.

Relevance to D&I: Development of valid and reliable measures of implementation process is essential to advancing theory and designing more effective strategies for implementation and sustainment of EBPs.

Funding: NIMH, W.T. Grant Foundation

Presentation 3:

PARTNERSHIPS FOR DISSEMINATION AND IMPLEMENTATION RESEARCH, METHODS AND PRACTICE: A SOCIAL NETWORK PERSPECTIVE

Presenter: C. Hendricks Brown, PhD

Co-authors: Sheppard Kellam; Sheila Kaupert; Craig L. PoVey; Rick Cady; Thomas W. Valente

Problem: As many research projects move from effectiveness to implementation, new partnerships need to be made for implementation research that involve policy makers, implementation scientists, community leaders, and methodologists. Our premise is that the ability of such partnerships to adopt evidence-based programs as well as to use innovative methods to evaluate implementation research can be captured through their social network structures.

Method: Two social network surveys were conducted to examine 1) how innovative research methods are disseminated and 2) how often researchers are contacted about adoption of evidence based programs. The first network survey involved 113 members of the Prevention Science and Methodology Group (PSMG). We then traced the dissemination of Generalized Estimating Equations (GEE), a successful analytic method that was developed through PSMG funding to examine how quickly important methods were adopted by research scientists. The second survey involved National Prevention Network (NPN), representing each of the states' and territories' drug abuse programming, to assess how close they were connected to research scientists.

Findings: For the first survey involving methodologists and prevention scientists, PSMG showed high connectedness (average density of 10.04), modest heterogeneity (0.35) and modest transitivity (0.21), implying that new methods that are centrally distributed are likely to disseminate widely and quickly, whereas methods that come from members closer to the periphery are likely to disseminate more slowly. GEE became known in the statistical world quickly but it took 15 years before the citations in scientific/substantive journals surpassed that in statistical journals. For the NPN survey one-third consulted with researchers on adoption. Implications for dissemination and implementation research are discussed.

Relevance to D&I Research: Social networks can be used to guide dissemination and implementation.

Funding: This project was supported by funding from NIDA and from NIMH

3H. STRENGTHENING CAPACITY FOR IMPLEMENTATION RESEARCH IN DEVELOPING COUNTRIES

Room: Brookside B

Session: Panel

Primary Contact/Discussant:

Jason B. Smith, PhD, MPH
Associate Professor
Department of Health Behavior and Health Education
Gillings Global School of Public Health
University of North Carolina at Chapel Hill
206 West Franklin Street
2nd Floor, Room 209
Chapel Hill, NC 27516
Tel: 919-843-3151
jbsmith@unc.edu

Chair:

Jason B. Smith, PhD, MPH, Associate Professor, University of North Carolina at Chapel Hill

Panelists:

Nhan Tran, PhD, World Health Organization
Kathleen Handley, PhD, Technical Advisor, NIH/FIC
Margaret Gyapong, MD, Ghana Health Service

Problem: High quality implementation research (IR) is critical to strengthening health policy and decision-making, improving the delivery of health services, increasing access to effective interventions, and ensuring sustainable health systems. However, the capacity to carry out such research in low- and middle-income country settings is limited. Additionally, the need to strengthen IR capacity at the individual, organizational and health systems level is often overshadowed by the narrow interest in the technical aspects of conducting the science.

Methods: Mixed methods – primarily broad article and document aggregation and review of work carried out and supported by USAID and the World Health Organization.

Findings: The three presentations included in this panel are:

- a global overview of gaps in implementation research capacity and progress towards the strengthening capacity for IR in low- and middle-income countries;
- a review of selected innovative tools available for use in IR capacity building efforts and discussion of their application in a systems context; and
- a country-specific example of IR capacity building and its role in increasing access to effective health interventions.

A discussant will respond to each of the presentations to highlight conceptual issues and challenges such as the engagement of diverse stakeholders in the research process as well as the measurement of impact of capacity strengthening programs. Approximately half of the session will be allocated to questions and discussion.

Advancing the field: This panel will identify key areas where capacity strengthening is currently needed to support implementation research and highlight progress towards this effort globally through investments in research infrastructure, and in the context of a systems approach. Taken as a group, the presentations will articulate the current context for capacity-building, and make recommendations for phasing priority investments.

Funding Sources: US Government, WHO Implementation Research Platform, Ghana Health Service

Concurrent Session 4 Abstracts

Concurrent Session 4 Abstracts
March 20, 2012
9:45 – 11:15 a.m.

4A. DESIGNING FOR DISSEMINATION

Room: Glen Echo

Session: Individual Oral Presentations

Chair: Michael Sanchez, MPH, CHES, National Cancer Institute

A DISTRIBUTION SYSTEM TO DISSEMINATE CHRONIC DISEASE PREVENTION TO SMALLER WORKPLACES

Session: Individual Oral Presentation (4A)

Primary Contact/Presenter:

Jeff Harris, MD, MPH, MBA
Professor
University of Washington
Health Promotion Research Center
1107 NE 45th Street, Suite 200
Seattle, WA 98115
Tel: 206-616-8113
jh7@uw.edu

Co-authors:

Kristen Hammerback, MA; Peggy Hannon, PhD, MPH; Cate Clegg, MPH; University of Washington. Avi Katzman, John Gallagher; Puget Sound Health Alliance

Problem: Workplaces with <1,000 employees employ half of American employees and are important targets for dissemination of evidence-based interventions (EBIs) to increase behaviors that prevent chronic diseases. Although chronic-disease-preventing EBIs exist to increase healthy eating, physical activity, tobacco cessation, and weight management, these EBIs are under-used in these smaller workplaces. Our prior research has shown substantial demand for these EBIs by smaller workplaces, yet few vendors serve them.

Large-scale dissemination often depends on distribution systems that include vendors and group purchasers/distributors. For example, member-employer organizations (MEOs), such as chambers of commerce and trade associations, often purchase and distribute health insurance from health plans acting as vendors. To learn if a similar distribution system might be viable for workplace-health-promotion EBIs, we interviewed vendors and MEOs.

Methods: Using qualitative methods, we recorded and transcribed semi-structured interviews with vendors and MEOs in King County, WA. We coded and analyzed the transcripts to identify themes.

Findings: We interviewed 11 vendors and 11 MEOs. Vendors currently do not see smaller employers as their target

market because of the high cost of reaching large numbers of these employers. Vendors of services promoting physical activity, tobacco cessation, and weight management are enthusiastic about the potential for MEOs to purchase and distribute to smaller employers. MEOs see the value of workplace-health-promotion EBIs but perceive little demand for these services from their employer members.

Implications for Dissemination: We found potential viability of a system that relies on MEOs to purchase and distribute workplace-health-promotion services to smaller employers. Crucial to such a system would be greater awareness among MEOs of smaller employers' demand for these services. As a next step, the University of Washington and the non-profit Puget Sound Health Alliance are developing a toolkit for MEOs to increase this awareness and to link MEOs with vendors.

Research Support: Centers for Disease Control and Prevention, through its Communities Putting Prevention to Work and Prevention Research Center programs.

IDENTIFYING FACTORS LIKELY TO INFLUENCE COMPLIANCE WITH DIAGNOSTIC IMAGING GUIDELINE RECOMMENDATIONS FOR SPINE DISORDERS AMONG CHIROPRACTORS IN NORTH AMERICA: A FOCUS GROUP STUDY USING THE THEORETICAL DOMAINS FRAMEWORK

Session: Individual Oral Presentation (4A)

Primary Contact/Presenter:

André Bussières, DC, MSc, PhD (Candidate)
Professor
Université du Québec à Trois-Rivières
3351, boul. Des Forges, C. P. 500
Trois-Rivières, QC G9A5H7
Tel: 819-376-5011 ext. 3972
andre.bussieres@uqtr.ca

Co-authors:

Andrea Patey, MSc; Jill Francis, PhD, C.Psychol; Anne E Sales RN, PhD; Jeremy Grimshaw, MBChB, PhD, FRCGP

Background: The Theoretical Domains Framework (TDF) uses psychological theories to explain challenges to implementing guidelines and thus may inform the design interventions to change professional behaviour. This framework was used to explore the perceptions of chiropractors in an American Provider Network and two Canadian provinces about their adherence to evidence-based recommendations for lumbar spine radiography.

Objective: To identify chiropractors' views about managing uncomplicated back pain without x-rays and to explore perceived barriers and facilitators to implementing recommendations on lumbar spine x-rays.

Methods: Six focus groups about managing back pain without x-rays were conducted with a purposive sample of chiropractors identified from the Provider Network service lists and professional associations in Canada. The interview guide was based upon the TDF. Focus groups were digitally recorded, transcribed verbatim and analyzed by two independent assessors using thematic content analysis based on the TDF.

Findings: Key beliefs were identified within five of twelve domains including: conflicting comments about the potential consequences from not ordering x-rays (risk of missing a pathology, avoiding adverse treatment effects, risks of litigation, determining the treatment plan and using x-ray driven techniques contrasted with perceived benefits of minimizing patient radiation exposure and costs) (Beliefs about consequences). Beliefs regarding professional autonomy, professional credibility, lack of standardization, and agreement widely varied (Social/professional role & identity). The influence of formal training, colleagues and patients also appeared to be important factors (Social influences). Further, there were conflicting comments regarding levels of comfort in managing patients without x-rays (Belief about capabilities), and guideline awareness and agreements (Knowledge).

Conclusion: The TDF has provided a useful framework to explore psychological factors including cognitive, social and organizational factors which may impact chiropractors' decision to follow recommendations. The results will inform the development of a theory-based survey to help identify potential targets for behavioural change strategies.

IMPROVING TRANSITIONS IN CARE FROM THE HOSPITAL TO HOME FOR COGNITIVELY IMPAIRED ADULTS AND THEIR FAMILY CAREGIVERS

Session: Individual Oral Presentation (4A)

Primary Contact:

Karen Hirschman, PhD, MSW
Research Assistant Professor
University of Pennsylvania School of Nursing
3615 Chestnut Street
Ralston Building, Room 334
Philadelphia, PA 19104
Tel: 215-573-3755
hirschk@nursing.upenn.edu

Presenter:

Mary D. Naylor, PhD, RN, University of Pennsylvania School of Nursing

Co-authors:

Karen B. Hirschman, PhD, MSW; Alexandra Hanlon, PhD; Kathryn H. Bowles, PhD, RN; M. Brian Bixby, MSN, CRNP; Christine W. Bradway, PhD, RN; Kathleen M. McCauley, PhD, RN, University of Pennsylvania School of Nursing; Mark V. Pauly, PhD, University of Pennsylvania Wharton School of Business

The goal of this study was to compare the effects of evidence based interventions of varying intensities (e.g., the Transitional Care Model (TCM) vs. two lower intensity interventions) on time to first readmission or death, total number of hospitalizations, and days hospitalized among cognitively impaired older adults. This study was funded by the Marian S. Ware Alzheimer's Program at the University of Pennsylvania and the National Institute on Aging (5R01AG023116). Using a quasi-experimental propensity score weighted design, a final sample of 407 participants were analyzed. The study was rolled out in two phases such that three hospitals were initially randomly assigned to one of three intervention groups, and then switched to the high intensity TCM intervention at the second time point. Little difference in outcomes lead to combining the low and medium intensity intervention groups (Comparison group). Cox regression, GEE and linear mixed models, weighted by full propensity score matching, for all subjects was used for analysis. When compared to two interventions of lower intensity that focused on the care provided in hospitals, a team-based, transitional care model (TCM) implemented by Advanced Practice Registered Nurses that included care of older adults throughout episodes of acute care increased time to first readmission or death (log-rank test, p=0.001). Through six months post-index hospital discharge, the profiles for all-cause rehospitalizations and rehospitalization days (log transformed) were significantly improved in the high intensity TCM intervention group in comparison to the lower intensity interventions. Findings are especially important given the projected growth of the population of older adults coping with multiple chronic conditions complicated by cognitive impairment. The TCM intervention has great potential for promoting positive outcomes for this challenging and vulnerable group of older adults with cognitive impairment and their family caregivers while reducing the use of costly health resources.

4B. COMMUNITY-BASED APPROACHES TO REDUCING HEALTH DISPARITIES

Room: White Flint Amphitheater

Session: Individual Oral Presentations

Chair: Donna McCloskey, RN, PhD, National Institute of Nursing Research

PRIORITY-SETTING TO SUPPORT EVIDENCE-BASED PROGRAMMING IN COMMUNITY SETTINGS: CURRENT PRACTICES AND OPPORTUNITIES

Session: Individual Oral Presentation (4B)

Primary Contact/Presenter:

Shoba Ramanadhan, ScD, MPH
Research Scientist
Dana-Farber Cancer Institute
450 Brookline Avenue
Boston, MA 02215
Tel: 617-582-7971
shoba_ramanadhan@dfci.harvard.edu

Co-authors:

PLANET MassCONECT C-PAC, Dana-Farber Cancer Institute; K. Viswanath, PhD, Dana-Farber Cancer Institute, Harvard School of Public Health

Introduction: Large-scale dissemination and implementation of systematic, evidence-based approaches for health promotion programming in Community-Based Organizations (CBOs) has great potential to improve population health. Many systematic approaches use methodical priority-setting as a first step. CBOs face tremendous challenges in this effort as they balance urgent needs with severe resource constraints, with little guidance about how best to engage in this work. We examined key drivers that facilitate or impede priority-setting in CBOs conducting health outreach with the aim to identify useful leverage points.

Methods: Data come from PLANET MassCONECT, a community participatory knowledge translation project aimed at building capacity to adopt Evidence-Based Programs among CBOs working with underserved populations in three Massachusetts communities: Boston, Lawrence, and Worcester. We gathered data from staff members from CBOs conducting health outreach in the three communities through focus groups (n=31) and a survey (n=214).

Results: Multiple factors appear to drive priority-setting simultaneously, e.g. needs assessments, local/state/national data, organizational mission, partnerships, and funding. Reliance on data was widespread, yet almost half of survey respondents reported barriers to using data, such as difficulty finding current data, a lack of local data, or challenges in accessing data. Focus group respondents described informal data collection efforts, the diverse range of evidence utilized, and challenges in finding data relevant to the population subgroups they serve.

Findings: Our results suggest that systematic priority-setting is a valued process in CBOs, but guidance is needed on how to do this effectively. An explicit method to incorporate contextual factors, such as the tremendous impact of multisectoral partnerships, into the priority-setting process is required. Capacity-building among practitioners may offer needed support to increased use of systematic approaches to priority-setting, narrowly, and program planning more broadly.

This work was funded by the National Cancer Institute (5R01 CA132651-03).

USING EVALUATION DATA TO IMPROVE THE IMPLEMENTATION OF NHLBI'S COMMUNITY HEALTH WORKER PROGRAMS

Session: Individual Oral Presentation (4B)

Primary Contact:

Zena Itani, MPH
Senior Policy Associate
Altarum Institute
1200 18th St NW
Suite 700
Washington, DC 20011
Tel: 202-776-5111
zena.itani@altarum.org

Presenter:

Jovonni Spinner, MPH, CHES, NHLBI/DARD

Co-author:

Matilde Alvarado, RN, NHLBI/DARD

Introduction: In 1994, the National Heart, Lung, and Blood Institute (NHLBI) began working with community health workers (CHWs) to translate research on cardiovascular disease (CVD) risk factors into heart health education and tools to reduce health disparities. This began the NHLBI CHW Health Disparities Initiative, which includes science-based, culturally appropriate health education programs for African Americans, American Indians and Alaska Natives, Filipinos, and Latinos. The programs use tailored tools (manuals, picture cards, risk factor booklets, and handouts) to implement three strategies: train the trainer, community education, and lifestyle and clinical management.

Research Methods: An evaluation across implementation strategies examined the programs' impact on participants' heart health knowledge, attitudes, behaviors, and CVD clinical measures where possible; as well as CHWs' heart health knowledge. Pre and post tests were used to collect data. Data sources included knowledge tests, "My Health Habits" survey responses, and clinical measures. Paired t-tests and regression analyses were used to compare outcomes before and after each strategy.

Findings: The Initiative's programs have positive effects on heart health knowledge for participants and CHWs leading the programs. CHWs in the train the trainer strategy showed significant improvement in knowledge, confidence in teaching the manuals, and perceived importance of CVD risk reduction. Participants in the community education strategy significantly improved knowledge, practice of heart healthy food behaviors, and the confidence to cook healthy foods. The proportion of physically active participants increased significantly, as did participants' maintenance of new heart health behaviors. Patients receiving lifestyle and clinical management showed mixed results for clinical measures (blood pressure, BMI, cholesterol, and fasting blood glucose).

Practice Implications: The evaluation data give NHLBI insight into the impact of different CHW program implementation strategies on participant outcomes, and benefits for CHW trainees. The results are being used to shape future program implementation, and CHW training and support.

DISSEMINATION OF COLORECTAL CANCER SCREENING THROUGH COMMUNITY ORGANIZATIONS: TIMING AND FIDELITY OF PROGRAM IMPLEMENTATION

Session: Individual Oral Presentation (4B)

Primary Contact/Presenter:

Annette Maxwell, DrPH
Professor
University of California, Los Angeles
650 Charles Young Drive South
Los Angeles, CA 90095-6900
Tel: 310-794-9282
amaxwell@ucla.edu

Co-authors:

Leda L Danao, PhD; Reggie T. Cayetano, MD, MPH; Catherine M. Crespi, PhD; Roshan Bastani, PhD, University of California, Los Angeles

Introduction: As part of a trial disseminating colorectal cancer (CRC) screening in the Filipino American community, we trained 109 Filipino American community health advisors (CHAs) from 22 organizations to deliver an intervention that involved conducting educational small-group sessions on CRC screening, passing out free FOBT kits and literature, reminding their contacts to be screened and mailing letters to participants' physicians. This analysis examines (1) correlates of early implementation, defined as commencement of implementation within 2 months of the CHA training, and (2) fidelity of program implementation.

Methods: We compared early versus late implementers on organizational characteristics including organization type (faith-based versus not), previous intervention exposure (yes/no), and zip code level median annual income and percent college education, and CHA characteristics including demographic characteristics, previous experience in doing CHA tasks, position within their organization (leader versus member), amount of time they can dedicate to this role, and perceived self-efficacy to promote CRC screening among their contacts, using bivariate statistics. Fidelity was assessed based on activity logs kept by CHAs.

Findings: Early implementers (9 out of 22 organizations, 41%) did not differ from late implementers with respect to organizational variables. CHAs at early implementation sites reported that they would be able to devote significantly more time to the study than those at late implementation sites (29 versus 17 hours/month, $p<.005$), and larger proportions were female (87% versus 67%, $p<.05$) and had participated in a previous CRC screening study (31% versus 13%, $p<.02$). Fidelity of program implementation ranged from 100% for distribution of FOBT kits to less than 50% for small-group educational session (versus individual sessions). Identifying correlates of successful implementation can potentially assist in selecting the most promising CHAs/implementation sites and in improving CHA training. Data suggest the need to monitor implementation dosage and fidelity/adaptation at each site.

Funding: Grant RSGT-04-210-05-CPPB from the American Cancer Society

4C. SCALE-UP AND LARGE SCALE D&I

Room: Forest Glen
Session: Individual Oral Presentations
Chair: Erin Eckstein, MSW, National Cancer Institute

OUTPATIENT QUALITY IMPROVEMENT NETWORK (OQUIN): FOCUS ON CARDIOVASCULAR DISEASE (CVD) PREVENTION

Session: Individual Oral Presentation (4C)

Primary Contact/Presenter:

Brent Egan, MD
Professor of Medicine
Medical University of South Carolina
135 Rutledge Avenue, RT 1230
Charleston, SC 29425
Tel: 843-792-1715
eganbm@musc.edu

The Challenge: South Carolina (SC) OQUIN was a national leader in CVD mortality since 1930 ('buckle' of the Stroke Belt). OQUIN began in 1999 with a mission to transition SC from a leader in CVD to a model of vascular health by promoting (i) effective primary care for hypertension, hyperlipidemia and diabetes and (ii) healthy lifestyles using low-cost, highly scalable tactics.

Methods: Providers and practices: (i) CME (conferences, newsletter) (ii) influential physicians/local experts [Clinical Hypertension Specialists) (iii) provider-specific practice data audit and feedback (iv) physician recognition programs, confidential online decision support tools.
For patients and communities: (i) DASH for Good Health Southern Style (ii) Small grants and stakeholder support (churches, schools, business, other non-profits).

Findings: OQUIN has grown to ~200 diverse practice sites with 1.7 million patients and ~500,000 hypertensives. The database (i) supports CME needs assessment and evaluation (ii) helps identify modifiable variables to improve risk factor control and health equity, provides preliminary data for comparative effectiveness and dissemination research. Risk factor control from 2000 to 2010 improved (i) Hypertension to <140/<90 from 49% to 70% (ii) Hyperlipidemia LDL <100 from 39% to 58%; and combined control of BP and LDL from 21% to 41% (iii) HbA1c <7% from 45% to 54%. In 2007, SC was 36th nationally in CVD with more improvement than other 'stroke belt' States. OQUIN is a growing model for health promotion and disease prevention across the lifespan through multidisciplinary collaboration (nursing, medicine, pediatrics, geriatrics, neuropsychiatry/ behavioral medicine).

References: *Arch Int Med*. 2005;165:1041–1047; *Ethnic Dis*. 2005;15:25–32; *Hypertension*. 2006;47:1–7; *J Clin Hypertension*. 2006;12:879–886; *J Am Soc Hypertens*. 2009;3:35–41; *J Clin Hypertens*. 2011;13:543–550; *Hypertension*. 2011;58:579-587; *Ethnic Dis* 2012;(in press [Egan BM, et al. Demographic differences in the treatment and control of glucose in type 2 diabetic patients: Implications for healthcare practice])

RESEARCH TRAINING AND CAPACITY BUILDING NETWORKS AS A WAY TO ENHANCE THE DEVELOPMENT AND UPTAKE OF AN EVIDENCE BASE FOR THE PREVENTION AND CONTROL OF NCDs

Session: Individual Oral Presentation (4C)

Primary Contact/Presenter:

Brian Oldenburg, MPsychol, PhD
Professor
Monash University
Alfred Hospital
Commercial Road
Melbourne, Victoria 3004
Tel: +61 419025692
brian.oldenburg@monash.edu

The ASCEND (Asian Collaboration for Excellence in NCDs) Research Network is funded by US NIH to provide 18-month face-to-face and online research training programs to (pre-)doctoral researchers from LMICs in Asian Region. It involves a collaborative training and research career development network among 5 research institutions/universities in India, Sri Lanka, Malaysia, Australia and USA. The research trainees attend face-to-face training programs as well as fortnightly online sessions via web conferencing, which aim to support research skill development as well career and leadership development. The trainees also undertake a 12-month mentored research project in their own country which is supported by a global faculty of experts in NCD prevention and control. There are currently 25 trainees undertaking this program with another 23 trainees from across Asia due to commence in June 2012. Monitoring and evaluation of this program focuses on the evaluation of: 1) program implementation; 2) the trainees' progress and career development; and 3) the wider reach and impact on policy and practice in the trainees' own countries. Since the program commenced in June 2011, one trainee has already completed a PhD with publications, two trainees have enrolled in doctoral programs (both with scholarships) and several trainees have attended conferences to present on their ASCEND-supported research projects. It is predicted that by the conclusion of the 18-month program that almost half of the trainees will commence research degrees, mainly in their own countries. Preliminary program evaluation has also identified ways in which the training and networking with other early career researchers has strengthened the majority of trainees' research projects. The training of and exchange among the 'early career' researchers has also strengthened research collaboration and exchange among their supervisors and other researchers from each of the 5 institutions, particularly in Kerala, India and Sri Lanka. Early findings from the ASCEND program not only illustrate how a training and capacity building network can build the research capabilities of 'early career' researchers, but also contribute to research collaboration that can have a future impact on policy and practice in LMICs that is relevant to the prevention and control of NCDs.

IMPLEMENTATION OF TF-CBT IN TANZANIA: TASK-SHIFTING MENTAL HEALTH CARE FOR ORPHANED YOUTH

Session: Individual Oral Presentation (4C)

Primary Contact/Presenter:

Shannon Dorsey, PhD
Assistant Professor
University of Washington
2815 Eastlake Avenue
Suite 200
Seattle, WA 98102
Tel: 206-685-6398.
dorsey2@uw.edu

Co-authors:

Karen O'Donnell, PhD; Kate Whetten, PhD, Duke University

Problem: Global mental health is increasingly receiving research attention. Nearly ten randomized clinical trials in low and middle income countries (LMIC) have demonstrated the effectiveness of evidence-based practices (EBP), However, only one trial focused on adolescents, and none on children, despite the particularly high mental health gap for this population (Saxena et al., 2007). Furthermore, very few D&I questions have been included in these trials, despite the focus on task-shifting—training non mental health professionals to deliver mental health interventions—and it's relevance to implementation science (Patel et al., 2009).

Methods: We examined feasibility and clinical outcomes for children and adolescents receiving Trauma-focused Cognitive Behavioral Therapy (TF-CBT) in Moshi, Tanzania, an area of high HIV prevalence and orphaned children. TF-CBT was provided to single sex, limited age groups (7-10; 11-13). Children and one of their guardians received 12 concurrent group sessions and 3 individual sessions (mid-group). A task-shifting approach was taken, with trained counselors having a high school equivalent degree. Children were assessed pre and post-treatment and at a 3-month follow up. The study employed the Apprenticeship Training Model (Murray, Dorsey et al., in press), developed specifically for training, supervision, and iterative, collaborative adaption with local lay counselors.

Findings: Post-treatment, children had significantly reduced PTSD and traumatic grief or shame at post-treatment (PTSD Child-report N=48; β=15.38; p<.001; Guardian report N=46; β=11.19; p<.001) with improvements maintained at follow-up. We present qualitative feasibility data (from guardians and counselors) that supports the Appenticeship Training Model approach, Presentation will include multimedia and discussion of active learning training and supervision strategies.

Advances for Field of D&I: Results show EBP implementation is feasible in LMIC and effective. The Apprenticeship Model offers a framework for for task shifting approaches to training and supervising lay counselors.

Funding: NIMH MH081764; USAID Victims of Torture Fund

4D. TECHNOLOGY IN MENTAL HEALTH

Room: Brookside A

Session: Individual Oral Presentations

Chair: Ken Weingardt, PhD, Veterans Health Administration

DEVELOPING AND PILOTING A WEB-BASED, LONG-DISTANCE IMPLEMENTATION STRATEGY FOR DEPRESSION CARE IN HOME HEALTHCARE PATIENTS

Session: Individual Oral Presentation (4D)

Primary Contact/Presenter:

Martha Bruce, PhD, MPH
Professor of Sociology in Psychiatry
Weill Cornell Medical College
21 Bloomingdale Road
White Plains, NY 10605
Tel: 914-997-5977
mbruce@med.cornell.edu

Co-authors:

Patrick J. Raue, PhD; Catherine Gonzales Reilly, MPH; Yolonda Pickett, MD, MS, Weill Cornell Medical College; Rebecca James, MA, Fordham University

Problem: This research addresses the challenge of implementing interventions in sectors of care that are decentralized and dispersed. Home Health exemplifies this problem: the USA has >10,000 Medicare certified home health agencies (HHA). Most are freestanding, small and without resources to support advanced quality improvement. Needed are effective implementation strategies with extended reach.

Methods: We describe and present pilot data on an implementation strategy designed to be accessible and relevant to HHAs nationwide. *MHTraining-Net* uses a web-based platform to support HHA's implementation of Cornell's Depression CAREPATH Intervention. Depression affects >25% of older HH patients, is mostly undetected or poorly treated, and leads to worse outcomes and higher costs. *MHTraining-Net* employs two e-modules (PHQ9 and CAREPATH training), webinars, consultation, toolkits, and social networking for long distance delivery of implementation activities: 1. Infrastructure development, 2. Training, 3. Supervision/feedback, 4. Social learning. *MHTraining-Net* involves administrators, supervisors and nurses in preparatory, start-up, and maintenance phases of implementation.

Findings: The pilot study was conducted with two HHAs in Florida and Ohio. We compared administrative data on depressed (PHQ9 >10) patients who received Usual Care (UC) pre-*MHTraining-Net* (N=23) to patients in care during the 4 months HHAs participated in *MHTraining-Net* (N=61). *MHTraining-Net*, but not UC, patients demonstrated clinically significant improvement (i.e., 6.8 vs. 2.7 point change; $p < .001$). Remission (PHQ9<5) rates also differed (PHQ9<5; 37.7% vs. 8.7%, $p<.0.05$).

Impact: This study contributes to Implementation Science by testing an implementation strategy designed to reach decentralized, geographically dispersed agencies. The synergism of the high rates of poorly treated depression in HHA patients coupled with growing relevance of depression to Medicare reimbursement has generated HHAs' interest in depression interventions. Given this interest, *MHTraining-Net* has the potential – with its wide reach – of significantly improving care for depression in HH patients and reducing the burden of depression in this population.

Funding: R01 MH082425; R01 MH082425-S1

EVALUATION OF AN INTERNET VERSION OF MINDFULNESS BASED COGNITIVE THERAPY FOR IMPLEMENTATION IN AN HMO

Session: Individual Oral Presentation (4D)

Primary Contact/Presenter:

Arne Beck, PhD
Director of Quality Improvement & Strategic Research
Kaiser Permanente Colorado
10065 E. Harvard Avenue
Suite 300
Denver, CO 80231
Tel: 303-614-1326
arne.beck@kp.org

Co-authors:

Zindel Segal, PhD, Centre for Addiction and Mental Health, Toronto; Sona Dimidjian, PhD; Jennifer N. Felder, University of Colorado, Boulder; Nancy Brace, MBA, RN; Jennifer Boggs, MSW , Kaiser Permanente Colorado

Problem: Mindfulness based cognitive therapy (MBCT), a combination of meditation practice and cognitive behavioral therapy (CBT), has demonstrated efficacy in preventing depression relapse, yet barriers to implementation of this therapy exist, including cost, access, and limited availability of trained therapists. This study is evaluating a newly-developed web-based version of MBCT (eMBCT) and its potential for more widespread implementation in an HMO. Results presented here are from initial patient and clinical provider assessments of the alpha version of eMBCT.

Methods: Formerly depressed patients (N=13) and clinicians/stakeholders (N=9) completed a satisfaction and usability survey after reviewing two modules of the eMBCT program and a subset of each group (9 and 4, respectively) participated in interviews to provide open-ended comments about eMBCT.

Findings: Patient and clinician/stakeholder survey ratings were favorable (> 5 on a 7 item likert scale) for ease of use, value of the program, and readability. Lower ratings were provided on clarity of navigation menus and explicit information on usefulness of the program to patients in staying well over time. Patient interview responses were generally favorable (e.g., "It made me feel like I was not alone in this…"), as were clinician/stakeholder responses (e.g., "[The site is] useful in providing an interesting, engaging, and interactive format for learning and practicing MBCT."). Suggestions for improvement included adding a progress tracker, troubleshooting/FAQ page, and components for social interactivity, and increasing diversity of participants shown in eMBCT.

Result suggest that eMBCT may be a promising program for broader implementation within an HMO. Additional work to be presented will include clinician/stakeholder reviews, patient focus groups and an open trial of the beta version of eMBCT with 50 formerly depressed patients.

Funding for this work was provided by NIMH: R34 MH087723

IMPLEMENTING EVIDENCE-BASED QUALITY IMPROVEMENT AND PATIENT KIOSKS IN SPECIALTY MENTAL HEALTH: IMPROVING EMPLOYMENT SERVICES AND OUTCOMES

Session: Individual Oral Presentation (4D)

Primary Contact/Presenter:

Alexander Young, MD, MSHS
Professor
UCLA & VA
11301 Wilshire Boulevard, 210A
Los Angeles, CA 90073
Tel: 310-268-3416
ayoung@ucla.edu

Co-authors:

Amy N. Cohen, PhD, Greater Los Angeles VA; Alison B. Hamilton, PhD, MPH, Greater Los Angeles VA and UCLA; Fiona Whelan, MA, UCLA; Anna Teague, MD, Durham VA; Deborah Mullins, PhD; Avila Steele, PhD, Houston VA; Eran Chemerinski, MD, Bronx VA; Max Schubert, MD, Central Texas VA; Kirk McNagny, MD; Christopher Reist, MD, Long Beach VA

Problem: Unemployment affects 90% of individuals with schizophrenia. Increasing employment can improve patient outcomes and reduce costs. Supported Employment (SE) is an evidence-based treatment that increases rates of competitive employment, but is seldom used. EQUIP was a multi-site, clinic-level, controlled trial that characterized gaps in care, and implemented patient-facing kiosks and evidence-based quality improvement to improve care and outcomes.

Methods: Across four states, 8 mental health clinics of the Veterans Health Administration were assigned to implementation or usual care. 801 adults with schizophrenia and 171 clinicians enrolled. A mixed-method assessment of organizational readiness for change was used to tailor implementation. Computerized patient self-assessment kiosks were integrated into care. Each site used quality improvement tools to identify why appropriate patients were not being provided with services. Using formative evaluation, gaps in care were identified and knowledge deficiencies addressed. Patients and clinicians were interviewed at baseline and 15 months regarding need, use, and intervention impact.

Findings: At baseline, interviews revealed shortcomings in competencies regarding SE. A logistic model predicted utilization of SE based on group status (intervention/control) while controlling for baseline utilization and desire to work. During the study, patients at intervention sites were 2.2 times more likely (95% CI: 1.1-4.3) to utilize SE compared to control sites. An employment effect were evident when examining site-level differences. The one intervention site that had good SE fidelity showed significant increases in employment (p=.004).

Conclusions: A large gap in care was addressed with context-relevant implementation strategies and kiosks to improve patient information. All sites increased appropriate service use. One site increased rates of employment. At three sites, outcomes were limited by low treatment fidelity. Successful uptake of evidence-based services was possible with assessment of clinic readiness, improved information, and strategies and tools to identify and address shortcomings in knowledge, attitudes, and capacity throughout implementation.

Funding: Primary: Health Services Research and Development Service and QUERI, U.S. Department of Veterans Affairs; Other: NIMH

4E. UNDERSTANDING UPTAKE OF EVIDENCE IN CLINICAL PRACTICE

Room: White Oak A

Session: Individual Oral Presentations

Chair: Melissa Riddle, PhD, National Institute of Dental and Craniofacial Research

UNDERSTANDING AUDIT AND FEEDBACK: APPLYING COGNITIVE THEORIES AND CONSTRUCTS TO ADDRESS THE 'INTENTION-BEHAVIOUR GAP'

Session: Individual Oral Presentation (4E)

Primary Contact/Presenter:

Heather Colquhoun, PhD
Postdoctoral Fellow
Ottawa Hospital Research Institute
1053 Carling Ave, Room 2-018
Administrative Services Building
Ottawa, ON K1Y4E9
Tel: 613-798-5555 ext. 19771
hcolquhoun@ohri.ca

Co-authors:

Jamie Brehaut, PhD; Jeremy Grimshaw, PhD, MB.ChB; Kelly Carroll, MSc,Ottawa Hospital Research Institute; Kevin Eva, PhD, University of British Columbia; Anne Sales, RN PhD, University of Alberta; Noah Ivers, MD CCFP, Women's College Hospital; Susan Michie, PhD, University College London

Problem: Audit and feedback (A&F) is a widely used and promising implementation intervention. A&F involves the development of a summary of some aspect of clinical performance over a specific period of time, and subsequent provision of that summary back to individual practitioners, teams or healthcare organizations. Significant variability in the effectiveness of A&F interventions exists, and progress in designing and delivering better A&F has been limited, in part because of a lack of a theoretical understanding of the causal mechanisms underlying A&F. The result is an inability to predict whether successful interventions will generalize, or to learn from failed interventions. To progress, we need to develop a theoretical understanding of how A&F intervention can and should work. We reviewed whether theory-based constructs from cognitive and educational psychology could be used to characterize A&F interventions, and suggest potential ways to improve them

Methods: A systematic review of A&F trials (n=141) was conducted. Eighty-three variables were collected in order to 1) determine the degree to which studies utilized theory-based constructs for intervention design, and 2) characterize the type, effectiveness, content, process, benchmarks and timing of the A&F interventions. Two extractors were utilized with consensus ratings.

Findings: Preliminary findings suggest theoretical constructs were invoked in less than 25% of the trial reports. The type of theory varied across social psychology, organizational, and diffusion theory. A&F interventions predominantly focused on information related to provider behaviour, utilized aggregate data for content, and were provided with comparison data based on the performance of others; however, 25% of studies lacked the detail required for full characterization. Results indicate clear suggestions for intervention description and design of A&F interventions.

Significance: This study furthers the 'basic science' of A&F interventions and has the potential to greatly improve the effectiveness of a widely used implementation intervention.

CHARACTERISTICS OF GUIDELINES THAT AFFECT UPTAKE IN CLINICAL PRACTICE: RESULTS OF A REALIST REVIEW ON GUIDELINE IMPLEMENTABILITY

Session: Individual Oral Presentation (4E)

Primary Contact/Presenter:

Monika Kastner, PhD
Postdoctoral Fellow
Li Ka Shing Knowledge Institute of St. Michael's Hospital
209 Victoria Street, 6th floor
Toronto, ON M5B 1W8
Tel: 905-515-3107
monika.kastner@utoronto.ca

Co-authors:

Leigh Hayden, MA, PhD; Julie Makarski, MSc; Ananda Chatterjee, MD; Lisa Durocher, MA; Laure Perrier, MEd, MLIS, PhD (Cand); Elizabeth Estey, MA; Melissa Brouwers, PhD; Onil Bhattacharyya, MD, PhD, CCFP

Problem: Clinical practice guidelines can support clinical decision making, specify beneficial therapeutic approaches, and influence policy. However, organizational constraints, the complexity of guidelines, and insufficient usability testing have limited their impact. Guideline implementability, the characteristics of guidelines that influence their use in practice, is not clearly understood. Targeting providers or practice environments to improve guideline implementation has been widely studied with varying results, but modifying the guidelines themselves (i.e., their text, content, presentation) is promising, as it is inexpensive and potentially more cost effective. To explore the relationship between guideline implementability and clinical decision making, we conducted a realist review to understand "*what works for whom, in what circumstances, and why*".

Methods: Consistent with realist review methods, we used a 5-step process to explore the concept of guideline implementability in the context of 4 disciplines (medicine, psychology, management, and human factors). Data analysis involved combining realist review methods with qualitative analytic techniques drawing from meta-ethnography. These techniques were used to organize guideline attributes into broad categories, and to describe their relationship with uptake as well as any trade-offs between attributes.

Findings: Of 250 articles that were reviewed independently by 4 reviewers, 1007 guideline attributes were identified and classified into 28 categories across 6 dimensions: language, evidence, format, feasibility, decision-making, and cognitive elements. We further analyzed these dimensions by developing a codebook of attribute definitions and categories. This process informed a final "implementability map" depicting attribute tradeoffs and their relationships with uptake, indicating that improving some of these dimensions will worsen others, and different stakeholders value these tradeoffs differently. Next steps include identifying which attributes can feasibly be changed during the guideline development process, and to develop a tool to facilitate guideline uptake.

AN INSTRUMENT TO MEASURE PRIMARY CARE PROVIDER OPINION OF THE USEFULNESS OF GUIDELINE COMPLIANCE REMINDERS

Session: Individual Oral Presentation (4E)

Primary Contact/Presenter:

Jill Marsteller, PhD, MPP
Associate Professor
Johns Hopkins Bloomberg School of Public Health
624 N Broadway
433 Hampton House
Baltimore, MD 21205
Tel: 410-614-2602
jmarstel@jhsph.edu

Co-authors:

Lilly Engineer, MD, DrPH; Jing Tian, PhD; David Bundy, MD; Richard Thompson, PhD; Albert Wu, MD; Marlene Miller, MD; Christoph Lehmann, MD, All Johns Hopkins Bloomberg SPH or SOM

Problem: Little is known about the usefulness to providers of implementing reminders and feedback bulletins to increase guideline compliance. There is no instrument currently available to measure perceived usefulness of interventions.

Methods: We issued a bi-monthly bulletin listing patients overdue for medication monitoring to 15 primary care providers at 2 inner city urban community health centers over a two-year period. We measured provider perceptions of usability or usefulness using at least four items each assessing: 1) timeliness (i.e., do I have the information available when I need it?); 2) acceptability (i.e. , do I agree that the information is important, the format is accessible and the information is accurate); 3) understandability (i.e., can I follow and see the implications of the information), and actionability (i.e., do I know what to do with the information and can I act upon it?). Likert-scaled responses ranged from 1-5 (strongly disagree to strongly agree). An interdisciplinary group reviewed items in multiple rounds and the survey was pilot tested with 2 providers not in the study population. Statistical analyses included exploratory factor analysis to assess scales in terms of preliminary convergent and discriminant validity and internal consistency.

Results: Separate factors emerged for each subscale we sought to measure. Some items' factor loadings overlapped on more than one factor. The overall measure of usefulness had good internal consistency (Cronbach's α=0.88). Subscales for acceptability (Cronbach's α=0.80), understandability (Cronbach's α=0.65) and actionability (Cronbach's α=0.76) were also internally consistent. Timeliness alone was only weakly consistent (Cronbach's α=0.51).

Conclusion: The instrument used to measure perceptions of usefulness of the feedback bulletin is potentially useful for measuring provider reaction to other interventions after additional testing in larger samples. In general quality improvement and practice management interventions should assess provider perceptions of usefulness in order to improve tools and enhance provider engagement.

Acknowledgements: This research was supported by a grant from the Agency for Healthcare Research and Quality (1R18HS017018-02, "The Medication Monitoring for Vulnerable Populations using Information Technology (MMITI) project").

4F. DISSEMINATION AND IMPLEMENTATION MEETING: THE ROLE OF CULTURAL ADAPTATION IN DISSEMINATION AND IMPLEMENTATION RESEARCH

Room: Brookside B

Session: Panel

Primary Contact/Co-Chair:

Belinda Sims, PhD
Health Scientist Administrator
National Institute on Drug Abuse
National Institutes of Health
6001 Executive Boulevard
Bethesda, MD 20720
Tel: 301-402-1533
bsims@nida.nih.gov

Co-Chair:

Jacqueline Lloyd, PhD, National Institute on Drug Abuse

Discussant:

Felipe Castro, PhD, Arizona State University

Panelists:

Elizabeth Stormshak, PhD, University of Oregon
Guillermo Prado, PhD, University of Miami
Nancy Gonzales, PhD, Arizona State University

Within prevention research, the need to incorporate culture and cultural factors is now recognized in the development of efficacious and culturally-relevant evidence-based prevention interventions. Nonetheless, there still exists limited research on the application of cultural adaptation, as evidence-based interventions now are being taken to scale in broad populations, settings, and systems. The purpose of this symposium is to examine the importance and role of cultural adaptation in type 2 translational research, with an emphasis on the application of cultural adaptation in implementation, dissemination and scaling-up of prevention interventions. This panel will address key questions including: 1) How is cultural adaptation utilized in the dissemination, implementation and scaling-up of prevention interventions? 2) At what point in the process is cultural adaptation most important? 3) What models exist and what gaps remain? The first presenter will discuss the tailoring of Family Checkup, a family-centered, selected prevention intervention designed to reduce risk behaviors in children, and will present results from a randomized control trial that tested the intervention in a diverse sample of youth and families. The second presenter will discuss findings from a study that examined the importance of parent-facilitator alliance and group cohesion when considering the role of culture in scaling-up Familias Unidas, an evidence-based drug abuse and HIV prevention intervention for Hispanic youth. The third presenter will introduce a model for adaptation and findings from a study aimed to adapt a prevention program for divorced families (the New Beginnings Program), for scaling up this intervention for court systems that serve diverse populations of parents. The discussant will highlight unifying themes from these presentations and comment on his work that involves development and implementation of adaptation models and discuss the need for research to further clarify application of cultural adaptation within evidence-based prevention interventions, especially with regard to dissemination and implementation.

Presentation 1:

DISSEMINATION OF THE FAMILY CHECK-UP INTERVENTION MODEL IN DIVERSE COMMUNITIES: EFFECTS ON PROBLEM BEHAVIOR AND NEXT STEPS

Presenter: Elizabeth Stormshak, PhD

The Family Check-Up (FCU) is a family-centered intervention designed to reduce risk behavior in children from early childhood to adolescence. This brief intervention has been effective at reducing risk factors and promoting adjustment across multiple randomized trials, including reductions in substance use and negative parenting. The FCU intervention has been tailored for diverse families through assessment and feedback on cultural issues that have been shown to impact youth development. In this paper, we will discuss the tailoring process and results from a randomized trial examining outcomes associated with the FCU in a diverse sample of youth and families. We will also discuss the development of a website for dissemination and community support for uptake of the FCU model. Middle school youth and families were randomly assigned to receive either school as usual (N= 100) or the FCU intervention (N=279). The families were ethnically diverse and included African American (16%); Latino/ Hispanic (18%); White (36%); American Indian (3%); Asian (8%); and biracial/mixed ethnicity (19%). Compared to control families, those who engaged in the FCU intervention had youth who reported less alcohol use, antisocial behavior, family conflict, and deviant peer involvement during the transition to high school. Intervention families showed less growth in family conflict and antisocial behavior over time (B = -.17; $p < .05$ and B = -.15; $p < .05$). Based upon Cohen's criteria (ie, moderate, d = .50, and large, d = .80), effect sizes were moderate for family conflict (.47) and large for antisocial behavior (.86) and deviant peer involvement (.77). Development of a website for dissemination follows from a series of randomized trials showing significant effects of the FCU on a variety of outcomes, including problem behavior and positive parenting. The website was developed to support uptake of the model in diverse communities.

This project was supported by grants DA018374 and DA028626 from the National Institute on Drug Abuse to Elizabeth Stormshak.

Presentation 2:

CHALLENGES AND OPPORTUNITIES IN SCALING UP AN EVIDENCE-BASED PREVENTIVE INTERVENTION FOR HISPANIC YOUTH: RESULTS FROM A MIXED METHODS STUDY

Presenter: Guillermo ("Willy") Prado, PhD
Co-authors: C. Hendricks Brown; David Cordova

Problem: To date, no Hispanic-specific drug abuse and HIV preventive intervention has gone beyond the effectiveness stage to being scaled up for broad implementation. Familias Unidas, an evidence-based drug abuse and HIV preventive intervention for Hispanic youth, was developed to address fundamental cultural values of the Hispanic community, especially using a group structure for parent training that reinforces community support. To be taken to scale, Familias Unidas has to be implemented in other settings such as primary care clinics, where live, group-delivered interventions may not be feasible and/or cost-effective. It remains to be seen whether an individually administered DVD formatted version of Familias Unidas would provide sufficient engagement or effective delivery.

Methods: A mixed methods approach was taken to examine whether and to what extent facilitator-parent alliance and group cohesion are aspects of Familias Unidas that are critical in retaining when considering the implementation of a DVD adaptation of Familias Unidas. Specifically, quantitative and qualitative data from a prior efficacy study and an ongoing effectiveness study were analyzed to determine whether facilitator-parent alliance and group cohesion predicted parent participation in the intervention.

Findings: The results showed that parents who perceived a strong alliance with all members of the group were 2.5 times more like to participate in the intervention. Similarly, parent–facilitator relationship quality was positively associated with parent participation. Qualitative data also support the notion that group processes and parent-facilitator alliance are important in predicting both parent participation and in helping families achieve their goals. Implications for designing an individually administered Familias Unidas intervention are discussed.

Relevance to D&I: The findings demonstrate that culturally syntonic processes, such as strong parent-facilitator alliances and group alliances, are important aspects when considering the implementation of a DVD-adaptation of family-based interventions, such as Familias Unidas, for Hispanic youth and their families.

Funding: NIDA P30 DA027828, NIDA R01 DA025192, and NIDA/NIAAA 3R01 DA025192 S1

Presentation 3:
CULTURAL BROADENING OF THE NEW BEGINNINGS PROGRAM
Presenter: Nancy A. Gonzales, PhD
Co-authors: Sharlene A. Wolchik, Emily Winslow, Qing Zhou, Irwin N. Sandler

Goal: The ultimate success of preventive interventions relies on their ability to engage and influence the growing presence of subcultural groups in the target population. Several models for adapting interventions for cultural diversity have been developed, but they typically result in segmented adaptations intended for a single group. There is a need for culturally broad models of adaptation that are sensitive to culture but can be delivered across groups and in multicultural settings. The current research aimed to adapt the *New Beginnings Program* (NBP), a prevention program for divorced families that demonstrated efficacy and long-term benefits for children in two randomized trials.

Methods: Our approach integrated previous recommendations but with the innovative goal of deriving a single program for African-American(AA), Mexican-American(MA), and Asian-American(ASA) parents. To achieve this goal we used qualitative methods to solicit input from multiple informants: 1) Program materials were reviewed by prevention scientists with experience adapting interventions for AA, MA, and ASA populations. 2) Service providers experienced in working with the above groups reviewed materials. 3) NBP was delivered with AA, MA, and ASA families in ethnically segregated and mixed groups. Parents and group leaders provided feedback after each session, through mid and post-program evaluations, and through post-program focus groups. 4) A cultural advisory board reviewed findings and recommended adaptations.

Findings: The above methods yielded clear, consistent evidence of program elements needing adaptation; these will be summarized. Although some themes were similar across groups, others were unique to specific cultural groups (e.g., cultural differences in attitudes about physical discipline were a concern for AA, and cultural differences in emotional expressiveness were a concern for ASA informants). Findings resulted in several adaptations to program content and process. This model offers an alternative approach to address diversity when adapting and disseminating interventions for broad public health benefit.

This research was supported by an Advanced Center for Intervention Services Research grant (NIMH P30 MH068685).

4G. EVALUATING WHAT IT MEANS TO 'EMPLOY' THE RE-AIM MODEL: IMPLICATIONS FOR IMPLEMENTATION AND DISSEMINATION FRAMEWORKS

Room: Grand Ballroom (Salons A-D)

Session: Panel

Primary Contact:

Peyton Purcell, MPH, CPH
Program Coordinator/CRTA
National Cancer Institute
National Institutes of Health
6116 Executive Boulevard
Suite 410, Room 4104
Bethesda, MD 20892
Tel: 301-594-9075
purcellp@mail.nih.gov

Chair/Discussant:

Russell E. Glasgow, PhD, National Cancer Institute Division of Cancer Control and Population Sciences

Panelists:

Rodger S. Kessler, PhD, ABPP, University of Vermont College of Medicine
E. Peyton Purcell, MPH, CPH, National Cancer Institute
Lisa M. Klesges, PhD, University of Memphis School of Public Health

Co-Authors:

C.J. Peek, PhD, University of Minnesota; Rachel Benkeser, MSPH, National Cancer Institute;
Kurt C. Stange, MD, PhD, Case Western Reserve University

Problem and First Paper: Many grant proposals and manuscripts reference a given theory, model or evaluation framework, but frequently it is not clear the extent to which the model was actually used. This issue of fidelity to a theoretical framework has generally not been addressed for application of implementation science or evaluation models. The first talk discusses what it means to fully employ a specific planning and evaluation model, RE-AIM, for program planning, implementation, evaluation and reporting.

Methods and Findings: The second paper reports results from a content review of 42 recent grant applications that proposed the use of the RE-AIM model and defines both conceptual and content specifications for use of the RE-AIM model. Review objectives included documenting the extent to which specific RE-AIM elements were proposed within the evaluation plan. The majority of grants used only selected elements of the model (less than 10% contained thorough measures across all RE-AIM dimensions). Few met criteria for "fully developed use" of RE-AIM.

Conclusions: The final paper and discussion of key criteria is intended to help investigators in their use of RE-AIM, and illuminate the broader issue of comprehensive implementation of evaluation models and frameworks, such as the medical home model. Applications that include costs and economic outcomes, address the relationships among different RE-AIM dimensions, evaluate impact on health disparities, employ mixed methods approaches, and assess unanticipated consequences, both negative and positive (e.g. generalization effects) are best positioned to improve public health impact evaluation.

This panel addresses conference themes by discussing progress in the use of explicit implementation science frameworks, applications of the RE-AIM framework to determine public health impact, and future directions by illustrating methods to specify what this actually means.

4H. PROXIMITY OF RESEARCH TO PRACTICE: WHAT DOES DELIVERY SYSTEM-BASED HEALTH SERVICES RESEARCH TEACH US ABOUT IMPLEMENTATION?

Room: White Oak B

Session: Panel

Primary Contact:

Michael E Gluck, PhD, MPP
Director, Translation Services
AcademyHealth
1150 17th Street NW, Suite 60Washington, DC 20036
Tel: 202-292-6727
michael.gluck@academyhealth.org

Chair:

Lisa A. Simpson, MB, BCh, MPH, President and CEO, AcademyHealth

Panelists:

Dominick Frosch, PhD, Palo Alto Medical Foundation Research Institute
Lucy A. Savitz, PhD, MBA, Intermountain Health Care
Edward Havranek, MD, Denver Health
Michael Seid, PhD or Peter Margolis, MD, PhD, Cincinnati Children's Hospital Medical Center

The implementation of electronic systems that produce new streams of data for researchers and the direct engagement of health services researchers by health care delivery organizations are changing both the process of health services research and the way in which research findings are moved into practice. In delivery systems, the proximity of researchers to practice helps assure that the topics investigated are of high relevance to practitioners. Similarly, the clinical richness of data from electronic health records helps assure more granularity in the results and may lead to greater utility for the delivery of care. Through presentation and discussion of four recent studies of the implementation of evidence-based health or health-care practices, this panel of delivery-system based health services researchers will identify potential lessons for other organizations and discuss the implications for the science of implementation more generally.

Presentation 1:

IMPLEMENTATION OF SHARED DECISION AIDS INTO ONGOING COMMUNITY-BASED PRACTICE

Presenter: Dominick Frosch, PhD

A substantial body of research supports the use patient decision aids in clinical practice, yet implementation of these interventions in routine care remains limited. Researchers at the Palo Alto Medical Foundation Research Institute have worked with their clinical colleagues to develop an innovative program called "Partners in Medical Decision Making", focused on delivery of patient decision aids at the point of care and supported by a grant from the Foundation for Informed Medical Decision Making. Data from the electronic medical record are used to provide feedback to participating clinics on the proportion of eligible patients reached with decision aids. In a complementary project, funded by the Department of Health and Human Services, an automated system has been created to deliver decision support to men eligible to consider prostate cancer screening. This presentation will review some of the challenges in implementation of patient decision support, innovative marketing methods to overcome these, and ways in which the electronic medical record can be leveraged to facilitate implementation.

Presentation 2:

QI SCIENCE: WHEN ARE IMPROVEMENTS READY FOR WIDESPREAD DISSEMINATION AND IMPLEMENTATION?

Presenter: Lucy A. Savitz, PhD, MBA

Delivery systems are operating in a dynamic environment. Systems of care cannot wait years to get results that drive decision-making; this is a fact that is balanced with the need for evidence to support decisions around health service delivery and impacts on our patients' and communities. As such, there is widespread acceptance and reliance on quality improvement work to support decision-making around transformation of care delivery. This talk begins by defining quality improvement science and presents examples that amplify the need for rigorous QI. Next, a conceptual framework emanating from our work and that of an IOM Workgroup is presented to understand the trajectory for how simple, rapid-cycle tests of change can optimally progress, inform, and directly contribute to the evidence base. Key characteristics of QI and suggestions for rigorous assessment to drive more informed evidence are provided. The role of realistic evaluation in QI and cutting edge thinking about intervention fidelity and external validity are discussed with opportunity for audience exchange as the field is evolving.

Presentation 3:

IMPLEMENTING EVIDENCE-BASED PRACTICES THAT REDUCE RACIAL DISPARITIES: INSIGHTS FROM SOCIAL PSYCHOLOGY

Presenter: Edward Havranek, MD

There is consensus that elimination of racial disparities in health is a high-priority goal for health care delivery systems. Electronic health records create unprecedented opportunities for organizations to identify differences in care by race, but also create difficulties for understanding if identified differences represent true disparities. Furthermore, there is evidence from social psychology research that simple dissemination of messages suggesting racial bias may have the paradoxical effect of reinforcing bias. This discussion will focus on our experiences identifying disparities and disseminating results, and on our studies of novel techniques for identifying and reducing bias.

Presentation 4:

NETWORKED IMPROVEMENT AND RESEARCH: ENGAGING PATIENTS AND CLINICIANS IN DISSEMINATION AND IMPLEMENTATION

Presenter: Michael Seid, PhD or Peter Margolis, MD, PhD

Dissemination and implementation often focuses on 'push' strategies. Patients and clinicians are inherently motivated towards better health and health care, but within our current system, there are few avenues for patients and clinicians to make a difference. We are designing and prototyping a system that harnesses the inherent motivation and collective intelligence of patients and clinicians and allows them to collaborate together to improve health. Funded by a Transformative R01 grant, the Collaborative Chronic Care Network (C3N) project is working with ImproveCareNow, a network of pediatric gastroenterologists to test this model. We will describe the principles behind the C3N project and the processes by which these are translated into practice.

Poster Session List and Abstracts

Poster Session List and Abstracts

1. A MULTI-METHOD QUALITY IMPROVEMENT INTERVENTION TO REDUCE RACIAL DISPARITIES IN HYPERTENSION CONTROL: FINDINGS FROM PRE-IMPLEMENTATION FOCUS GROUPS

Primary Contact/Presenter:

Hanan Aboumatar, MD, MPH
Assistant Professor
Johns Hopkins University
601 North Caroline Street
Baltimore, MD 21287
Tel: 443-287-1419
habouma1@jhmi.edu

Co-Authors:

Cheryl Anderson, PhD, MPH, MS; Romsai Boontasai, MD, MPH; Gary Noronha, MD, FACP; Mary Twomley, MS; Jeanne Charleston; Jill Marsteller, PhD, MPP; Katie Dietz, MPH; Lisa Cooper, MD, MPH, FACP, Johns Hopkins University School of Medicine

Abstract:

How the research advances the field of dissemination and implementation: Towards development of tailored interventions to improve blood pressure (BP) control in urban primary care practices, we sought input from clinicians and healthcare staff on the relevance and usefulness of quality improvement strategies.

Problem: Improving BP control is challenging in primary care settings. Feedback from frontline staff and clinicians via focus groups can be used to tailor quality improvement strategies to meet local needs and achieve sustainability

Methods: We conducted focus groups with primary care physicians (PCPs, n=37, 6 groups) and medical assistants (MAs, n=62 , 6 groups) from 6 urban primary care sites in Baltimore, Maryland and sought participant input on 3 quality improvement approaches: 1) BP measurement using automated devices and a standardized protocol; 2) staffing for patient care management to enhance adherence to medications and lifestyle recommendations; and 3) clinician communication skills training and feedback using a computerized dashboard with performance metrics stratified by race. Focus groups were audio taped and transcribed. Two stage thematic analyses are being conducted using NVIVO software.

Results: Themes on BP measurement included concerns about time demands, validity of automated devices, and lack of added benefit compared with current practices of 'double checking' MA measurements using manual devices. Expected benefits of care management services included more 'face time' with patients to address adherence issues. Participants suggested that care managers should be familiar with communities served by the practice, work onsite and coordinate with existing staff, and offer home visits. Provider education was viewed as having limited potential

benefit, since poor BP control was perceived as mainly due to societal or patient factors. However, participants recommended alternative educational strategies including: identifying and describing best practices of local exemplars, providing patient level data on adherence and BP trends over time, and using clinical dashboards to compare provider performance within (but not between) practice sites.

Conclusions: Focus group findings provided important perspectives on expected barriers and suggestions for tailoring interventions to meet the needs of urban primary care practices and enhance likelihood of success and sustainability.

Acknowledgements: This research was supported by a grant from the National Heart, Lung, and Blood Institute. (P50HL0105187)

2. AN EVALUATION OF THE IMPLEMENTATION AND POTENTIAL SUSTAINABILITY OF THE DECIDE INTERVENTION

Primary Contact/Presenter:

Andrea Ault-Brutus, PhD, MPA
Post-Doctoral Research Fellow
Harvard Medical School
180 Longwood Avenue
Boston, MA 02115
Tel: 617-432-3459
aultbrutus@hcp.med.harvard.edu

Co-Authors:

Catherine Lee, MD, Brown Medical School; Margarita Alegria, PhD, Harvard Medical School, Cambridge Health Alliance

Abstract:

A critical issue in improving the quality of health care is the gap between the development of new health care practices and the uptake of these practices into health care organizations. This gap especially appears to be evident in health care organizations that predominately serve racial/ethnic minorities patients and is thought to be one reason why there are disparities in health care. To reduce this "research to practice gap," researchers posit that examining the organizational context within which the intervention is implemented may help to reduce this gap as well as advance the science of implementation. Some researchers also contend that active dissemination efforts, such as an organization's exposure to new interventions via participation in an effectiveness trial, could influence the uptake of the intervention into the organization in the long term. Within the context of an effectiveness trial, this qualitative study examines differences in organizational factors that are important for implementing and hypothetically sustaining a quality improvement intervention in 10 mental health clinics. The study also assesses whether participation in the effectiveness trial could influence the clinics to uptake the intervention once the trial is completed. Semi-structured interviews were conducted with key informants from each clinic participating in the effectiveness trial. A total of 18 interviews were conducted. The study identifies organizational factors (i.e., linkage of intervention to organization's values; leadership support; staff buy-in; infrastructure/administrative support; limited leadership/staff turnover; future funding; proven effectiveness) that are important in successfully implementing and sustaining a quality improvement intervention in low resource settings that predominately serve racial/ethnic minorities, as well as, identify a dissemination effort that could potentially advance the spread of new interventions in these settings. The study was supported by a National Center on Minority Health and Health Disparities Research Grant # P60 MD 002261 and NIMH Training Grant # T32MH019733-17.

3. THE ANNUAL SURVEY OF EVIDENCE-BASED PROGRAMS: MEASURING CORE CONSTRUCTS FROM IMPLEMENTATION TO SUSTAINABILITY WITHIN A STATEWIDE SCALE-UP

Primary Contact/Presenter:

Stephanie Bradley, MS
Evaluation Specialist
Penn State EPISCenter
306 Allen Street
State College, PA 16801
Tel: 404-454-6082
sbradley@episcenter.org

Co-Authors:

Sebrina Doyle, MS; Brittany Rhoades, PhD; Brian Bumbarger, Director, Penn State EPISCenter

Abstract:

The Annual Survey of Evidence-based Programs (ASEP) is a quantitative measure specifically developed to measure the implementation of evidence-based programs (EBPs) in the context of a real-world, statewide roll-out of a diverse menu of programs. The ASEP stands in contrast to measures of implementation and sustainability designed for and used within small-scale research studies focused on a single EBP. It is designed to empirically examine grantees' experiences through the grant funding period and beyond in an effort to understand the process from adoption to maintenance of a program under natural conditions (Rhoades, Bumbarger, & Moore, in press).

Since 2005, the ASEP has been completed annually by former and current grantees funded to implement EBPs in their communities by the Pennsylvania Commission on Crime and Delinquency. A total of 205 respondents (i.e., grantees) have provided data, representing 145 implementation sites throughout Pennsylvania. The EBPs implemented represent an array of program types (e.g. family intervention, bullying prevention) and implementation locations (schools, communities, mental health agencies).

This study evaluates the psychometrics of the ASEP instrument, covering six broad areas: Training, Local Evaluation, Fidelity, Implementation, Sustainability, and Community Coalition Involvement. Alpha levels previously reported for these constructs range from .63-.93. This poster will report individual scale properties, and item and scale correlations for the scales associated with the constructs.

As communities increasingly receive funding to implement EBPs and we strive to provide communities with the support needed to be successful, it is essential for researchers and other EBP stakeholders to have a valid and reliable instrument to measure the multiple facets of the implementation of a wide variety of EBPs. Such an instrument should enable stakeholders to evaluate areas of implementation strengths and weaknesses during and after seed funding years.

This research is supported by grants from the Pennsylvania Commission on Crime and Delinquency.

4. ACCEPTABILITY OF A WEB-BASED COMMUNITY REINFORCEMENT APPROACH AMONG AMERICAN INDIAN/ALASKA NATIVE SUBSTANCE USERS: IMPLICATIONS FOR DISSEMINATION

Primary Contact/Presenter:

Aimee Campbell, PhD
Research Scientist
New York State Psychiatric Institute
Columbia University
1051 Riverside Drive
Box 120, Room 3732
New York, NY 10032
Tel: 212-740-3503
anc2002@columbia.edu

Co-Authors:

Gloria M. Miele, PhD, Columbia University; Frankie B. Kropp, MS, LICDC, University of Cincinnati; Traci Rieckmann, PhD, Oregon Health & Science University; Edward V. Nunes, MD, New York State Psychiatric Institute, Columbia University

Abstract:

Problem: Longstanding disparities in substance use and barriers to meeting treatment needs exist among American Indian/Alaska Native (AI/AN) communities. A web-delivered intervention could increase access and improve service delivery. The purpose of this study was to assess acceptability of the Therapeutic Education System (TES), a web-based version of the Community Reinforcement Approach, among AI/AN men and women enrolled in outpatient substance abuse treatment.

Methods: Forty AI/AN clients from two programs (located in the Northern Plains and Pacific Northwest), completed assessments at baseline, during 8 weeks of TES, and 1-week post TES completion. Acceptability was measured by (a) proportion of participants who agreed to participate; (b) treatment retention; and (c) participant feedback collected after each TES module across seven indices using Likert-type scales (range=0-10). Mean feedback scores of < 6 would be considered necessary to revise/adapt.

Findings: Sixty-eight clients were approached for the study and 40 enrolled (58.8%). Participants completed an average of 19.5 modules. Results indicate high acceptability across seven indices: interesting (M=8.3), useful (M=8.5); introduction of new material (M=8.3), easy to understand (M=7.4); satisfaction (M=8.5); relevance (M=8.4), and overall likability (M=8.2). The mean range across all indices was 7.8 (Module: Self-management Planning) to 9.4 (Module: Drug use, HIV and Hepatitis). Open-ended feedback for lower-rated modules included increasing content about Native lifestyle and frustration in the "precision teaching" approach which uses repetition and pace-setting to promote content mastery.

Implications: Efficacious interventions often require context or population-specific adaptation to maintain effectiveness during implementation. Overall, these findings suggest that core TES content is acceptable among a diverse AI/AN client population who agreed to participate. Initial, lower acceptance rates may indicate that web-based interventions need more comprehensive introduction. Acceptability may improve for several modules with greater visibility of AI/AN-specific culture and lifestyle.

This research was supported by National Institute on Drug Abuse, National Clinical Trials Network grants: U10 DA13035 (PIs: EV Nunes, J Rotrosen); U10 DA013732 (PI: E Somoza); and U10 DA015815 (PIs: D McCarty, J Sorensen).

5. MEASURING AND ESTIMATING THE ECONOMIC BENEFITS AND COSTS OF PREVENTION DELIVERY AND SUPPORT SYSTEMS

Primary Contact/Presenter:

D. Max Crowley, MS
Prevention and Methodology Fellow
Pennsylvania State University
402 Marion Place
135 E. Nittany Avenue
State College, PA 16801
Tel: 919-475-1314
dmc397@psu.edu

Abstract:

Due to the rise of large-scale substance abuse prevention initiatives (Cho, Halfors, Iritani & Hartman, 2009; Ringwalt et al., 2002; Spoth et al., 2004, US Department of Education, 1998), program costs and benefits impact an increasing number of organizational partners (schools, community agencies) and service systems (criminal, health). In particular, the resources to support program adoption (e.g., capacity building, program training) and implementation (e.g., participant recruitment, program delivery, fidelity monitoring) often must be obtained from a variety of sources through braided funding initiatives. This development has added complexity to the already challenging process of conducting benefit-cost analyses (BCA) of substance abuse program adoption and implementation, yet researchers lack a clear framework for integrating and analyzing information from these diverse sources in an efficient manner. In particular, researchers are often uncertain (a) about the ethical, policy and logistical challenges surrounding BCAs of substance abuse prevention programs, (b) about how to measure the costs and benefits of program adoption and implementation, and (c) about which techniques or approaches can minimize measurement burden when conducting BCAs. Without guidance around these areas, current BCAs of substance abuse prevention efforts fail to employ a consistent methodology resulting in an inability to compare or interpret estimates of program efficiency. This work will outline a framework to describe protocols for attending to the ethical and logistical issues of collecting and analyzing cost and benefit data, identify procedures and methods to minimize measurement burden when conducting BCAs, and articulate a flexible approach for estimating the costs and benefits of substance abuse prevention. This framework is built upon review of the extant literature and lessons learned from an ongoing benefit-cost analysis of a major prevention support and delivery system.

6. REPLICATION RESEARCH: DEVELOPING A FRAMEWORK FOR IMPLEMENTATION RESEARCH

Primary Contact/Presenter:

Janet Curran, PhD
Postdoctoral Fellow
Ottawa Hospital Research Institute
1053 Carling Avenue
Ottawa K1Y4E9
Tel: 613-798-5555
jacurran@ohri.ca

Co-Authors:

Vachon B, PhD; Grimshaw J, MBChB, PhD, Ottawa Hospital Research Institute

Abstract:

Problem: Replication is necessary to advance science as reliable evidence depends on the empirical demonstration of its reproducibility, validity, and generalizability over a range of instances and contexts. Multiple barriers hinder appropriate replication of research findings including overemphasis on original research, funding agencies and journal editors' preferences, poorly reported interventions and lack of clarity around the term replication. The main objective of this knowledge synthesis is to develop critical discourse around the concept of replication and increase its appropriate use in implementation research. Methods: In this meta-narrative review we employed formal and informal strategies to search the literature from a variety of disciplinary fields. Abstracts and papers were screened by two independent coders. Included papers were classified into disciplinary fields in order to compare conceptual similarities and differences. A coding framework, adapted from a concept analysis method, was developed to guide the data extraction process. Thematic analysis and concept mapping were used to analyze the content of the papers. Findings: Four hundred ten papers were screened and 231 were retained for full review. Relevant papers were identified across a variety of disciplinary fields (Health, n=34; Education, n=7; Business, n=13; Psychology, n=22; Social Science, n=25, Physical Sciences/Math, n=5; Other, n=2). Results suggest multiple definitions of replication exist within and across various fields which propose different views of replication research. Authors present varying perspectives on the ways in which this kind of research is essential for the advancement of science and how it can and should be performed.

Conclusion: The resulting framework will promote and guide the conduct of replication in implementation research. It will provide support for researchers and research users to advocate for replication and sensitize research funders and publishers to its value for the development of credible and authentic knowledge.

Funding: This project was funded by a CIHR Knowledge Synthesis Grant

7. DETERMINING INTERVENTION FIDELITY FROM CHRONOLOGICAL FIELD NOTES

Primary Contact/Presenter:

Jo Ann Dowell, PhD, PNP, FNP-BC, CFNE
Assistant Professor
Winston-Salem State University
601 MLK Drive, FL Atkins Building
SOHS-Division of Nursing, Suite 205
Winston-Salem, NC 27110
Tel: 336-750-8903
dowellj@wssu.edu

Abstract:

Intervention fidelity (IF) is a relatively recent methodological consideration in nursing research that refers to the adherent and competent behaviors by the interventionist in the delivery of the intervention as planned (Santacroce, Maccarelli, & Grey, 2004; Stein, Sargent, & Rafaels, 2007). Intervention fidelity is a major contributor to the internal validity of a study. When an intervention is delivered as prescribed, the inference that the outcome is caused by the intervention is supported. If intervention fidelity is low, the expected differences between intervention group and control group may not occur. Historically, researchers have used various recording devices [audio or video tapes] to gather data on intervention fidelity. However, concerns about privacy or disruption of the intervention as a result of taping may prevent this method from being used. Field notes written at the time of the delivery may be a solution. However, field notes have not been extensively tested as an alternative device. The purpose of this pilot study was to explore an alternative method of determining intervention fidelity using chronological field notes (CFNs) (Stein, et al., 2007; Waltz, Addis, Koerner, & Jacobson, 1993). Method: A secondary analysis using data from an intervention study that used chronological field notes was completed. A randomly selected sample of chronological field notes (N=181) written by interventionist nurses (N=20) were coded using the Collaborative Study Psychotherapy Rating Scale (CSPRS), a validated fidelity instrument used in similar studies. Results: The interrater reliability (IRR) on the CSPRS was excellent on adherence, IRR .95 and Cronbach alpha .97 and for the new competence scale IRR .74 and Cronbach alpha .91. The results on the CSPRS were comparable to a study (Hill, 1992) that used traditional methods of transcribed audiotapes. This exploratory study provided support that an alternative methodological approach to determining intervention fidelity is feasible. Further research with a larger sample is needed to determine intervention fidelity using field notes.

8. THE INTERACTION BETWEEN INDIVIDUAL-LEVEL AND ORGANIZATIONAL-LEVEL BARRIERS ON DISSEMINATION IN COGNITIVE-BEHAVIORAL THERAPY FOR CHILD ANXIETY

Primary Contact/Presenter:

Margaret Mary Downy, BA
Research Specialist
University of Pennsylvania
3535 Market Street
Philadelphia, PA 19104
Tel: 215-746-2690
mdowney@mail.med.upenn.edu

Co-Authors:

Rinad S. Beidas, PhD, University of Pennsylvania; Julie Edmunds, MA; Philip Kendall, PhD, ABPP, Temple University

Abstract:

Ecological approaches to dissemination and implementation (D&I) recommend consideration of the relationship between individual- and organizational-level (IOL) factors associated with D&I of empirically-supported treatments (ESTs). The current study reports on IOL characteristics of clinicians who participated in training on an EST for the treatment of child anxiety, the Coping Cat (Kendall & Hedtke, 2006). Participants were randomized to a 6-hour didactic workshop accompanied by 3 months of follow-up consultation as part of a larger study (Beidas et al., in review). Consistent with an ecological framework (Beidas & Kendall, 2010), we examined (a) individual-level therapist factors including demographics (e.g., degree status, clinical experience) and characteristics (i.e., self-efficacy) and (b) organizational factors (e.g. organizational climate). Prior to training, therapist variables were measured using the Clinician Demographic and Attitude Questionnaire (Beidas et al., 2009) and the Evidence-Based Practice Attitude Scale (EBPAS; Aarons et al., 2005). Organizational-level variables were measured using the Organizational Readiness for Change measure (ORC; Institute of Behavioral Research, 2002). Following training, therapist self-efficacy was measured using the Self-Efficacy Questionnaire (adapted from Ozer et al., 2004). The research examines the relationships between individual-level (i.e., degree status, self-efficacy, and attitudes) and organizational-level (i.e., motivation to change, staff attributes, organizational climate, adequacy of resources) variables. Degree status (i.e., non-doctoral vs. doctoral) was found to be related to EBPAS divergence ($r = -.27$, $p < .00$): individuals with a doctoral degree endorsed less perceived divergence between current practice and ESTs. Furthermore, degree status was related to motivation to change ($r = -.22$, $p < .02$) and staff attributes ($r = .26$, $p < .01$). Doctoral-level participants endorsed less motivation to change and more favorable staff attributes. With greater understanding of IOL factors amongst community clinicians, we can improve our understanding of how to support those implementing community-based care.

This research was supported by NIMH grant: F31 MH083333

9. INFLUENCING DISSEMINATION AND IMPLEMENTATION SCIENCE THROUGH INNOVATIVE GIS APPLICATIONS

Primary Contact:

Daniela Friedman, MSc, PhD
Assistant Professor
University of South Carolina
Cancer Prevention and Control Program
915 Greene Street
Columbia, SC 29201
Tel: 803-77-9933
dbfriedman@sc.edu

Presenter:

Swann Arp Adams, PhD, University of South Carolina

Co-Authors:

Swann Arp Adams, PhD; James R. Hebert, ScD; Leepao Khang, MPH; Daniela B. Friedman, MSc, PhD, Statewide Cancer Prevention and Control Program, University of South Carolina; Vicki M. Young, PhD; Dayna Campbell, MS, South Carolina Primary Health Care Association; James R. Hebert, ScD

Abstract:

Cancer-related health disparities in South Carolina (SC) are among the largest in the nation. The SC Cancer Prevention and Control Research Network, in partnership with the SC Primary Health Care Association (SCPHCA), and Federally Qualified Health Centers (FQHCs), aims to reduce cancer disparities by promoting evidence-based cancer interventions in community-based primary care settings. Partnership activities include examining FQHCs' capacity for conducting research and developing a cancer-focused data sharing network. Data sharing and collaborative analysis is viewed by the team as critical to support networking between FQHCs and researchers for future research aimed at translating evidence-based strategies into practice. A data-sharing subcommittee with representatives from the SC Statewide Cancer Prevention and Control Program and the SCPHCA was convened to pilot a system for sharing and analyses of administrative claims data currently housed in the SCPHCA's central data repository. Geospatial methods were used to compute distance measures (between clinic patients and the center) as well as neighborhood characteristics (of patients' residences). Protocols were developed and implemented to acquire, process, and analyze data. Poisson regression modeling techniques were used to compute and compare rates of cervical cancer screening by distance and neighborhood measures. Partnership activities resulted in the development of formalized business agreements between the academic unit and three FQHCs with multiple clinic sites and the SCPHCA. This novel and innovative integration of geospatial information with clinical practice, cancer screening, and health outcomes will advance dissemination and implementation science and influence future evidence-based interventions that will reduce cancer-related health disparities in SC. Study funded by the Centers for Disease Control and Prevention and National Cancer Institute-funded Cancer Prevention and Control Research Network U48/DP001936-01W1 (PI: J.R. Hébert; Co-PI: D.B. Friedman). Partially supported by an Established Investigator Award in Cancer Prevention and Control from the Cancer Training Branch of the NCI to JR Hébert (K05 CA136975).

10. ENHANCING INFORMED CONSENT BEST PRACTICES: DISSEMINATING REVERSE SIMULATION

Primary Contact/Presenter:

Elizabeth Goldfarb, BA
Research Assistant, Postgraduate Medical Education
Massachusetts General Hospital
One Bowdoin Square
7th Floor
Boston, MA 02114
Tel: 617-726-9691
egoldfarb1@partners.org

Co-Authors:

John A. Fromson, MD; Tristan Gorrindo, MD; Robert J. Birnbaum, MD, Postgraduate Medical Education, Massachusetts General Hospital

Abstract:

The process of obtaining informed consent to initiate treatment is integral to safe and thoughtful care. It has the potential to be collaborative, addressing the needs of prescribers, patients, and their family members. At the 2011 D&I Conference, we presented a novel web-based "reverse simulation" tool featuring a provider obtaining informed consent according literature-standard best practices. We have scaled up this initiative nationally and successfully sent two versions to patients, family members, and providers, enabling us to identify disparities and consensus regarding best practices. Each version reflects a distinct clinical scenario: initiating medication treatment with an antipsychotic for a patient with psychosis, and an SSRI for a patient with depression.

While data collection is ongoing, we have analyzed responses from 210 providers, 36 patients prescribed the medications, and 89 family members of patients using a mixed-methods approach. We quantitatively compared ratings of the doctor's performance, finding that providers rated the doctor more highly. After coding free-text responses, we observed that the patient/family group retained few of the reasons for taking the antipsychotic (28%) or SSRI (26%), as predicted by providers. We used a typology from literature standards to code free-text suggestions for additional elements, which were similar across constituents and scenarios.

Seeking direct feedback identifies health literacy gaps, can enhance coordination of care, and reduce medication error, important for treatment initiation across therapeutic domains. The scaling-up identifies contextual factors influencing participation in such a D&I initiative. This research was funded by academic institutional support.

11. INTERNATIONAL CONSENSUS GUIDELINES FOR THE ETHICAL CONDUCT AND ETHICS REVIEW OF CLUSTER RANDOMIZED TRIALS

Primary Contact/Presenter:

Jeremy Grimshaw, PhD
Senior Scientist, Clinical Epidemiology Program
Ottawa Hospital Research Institute
Full Professor, Department of Medicine, University of Ottawa
Ottawa Hospital - General Campus
Centre for Practice-Changing Research (CPCR)
501 Smyth Road, Room 1286
Ottawa, Ontario K1H 8L6
Tel: 1-613-798-5555
jgrimshaw@ohri.ca

Co-Authors:

Taljaard M, Weijer C, Brehaut J, Boruch R, Donner A, Eccles MP, McRae M, Saginur R, White A, Zwarenstein M, Grimshaw JG

Abstract:

Cluster Randomized Trials (CRTs) are the optimal design for evaluating the effects of dissemination and implementation strategies. However, CRTs raise difficult ethical challenges for researchers, research ethics committees, regulators, and sponsors seeking to fulfill their respective roles responsibly. For example, in a single CRT, the units of randomization (e.g., medical practices), experimentation (e.g., health professionals), and observation (e.g., patients) may differ. These and other characteristics complicate the interpretation of standard research ethics guidelines. We conducted a four-year mixed-methods research project, funded by the Canadian Institutes of Health Research, with the ultimate goal of developing principled ethics guidelines for CRTs. Our project included interviews with key informants, review of a sample of published CRTs; surveys of authors of CRTs; and surveys of research ethics chairs in the USA, Canada, and the UK, as well as an extensive ethical analysis. Six ethical questions considered specific to CRTs and in need of further exploration and analysis were identified: (1) Who is a research subject? (2) From whom, how, and when must informed consent be obtained? (3) Does clinical equipoise apply to CRTs? (4) How do we determine if the benefits outweigh the risks of CRTs? (5) How ought vulnerable groups be protected in CRTs? (6) Who are gatekeepers and what are their responsibilities? Each issue was addressed in a discussion paper laying out principles, policy options, and rationale for proposed ethics guidelines. An international consensus meeting was then held in Ottawa in November 2011 attended (in-person and by webcast) by more than 100 representatives from funding agencies, trialists, ethicists, journal editors and research ethics chairs. A multidisciplinary Expert Panel subsequently met together in closed session to develop recommendations. The first draft of the consensus statement is now available and comment is being invited from the broader research community before final publication.

12. A MULTIFACETED IMPLEMENTATION INTERVENTION IN SUPPORT OF CANCER FAMILY HISTORY DOCUMENTATION AND GENETIC CONSULTATION REFERRALS

Primary Contact/Presenter:

Alison Hamilton, PhD, MPH
Research Health Scientist
VA Greater Los Angeles & UCLA
11301 Wilshire Boulevard (210A)
Desert Pacific MIRECC
Los Angeles, CA 90073
Tel: 443-287-1419
alisonh@ucla.edu

Co-Authors:

Diane Schoeff, PhD, VA Greater Los Angeles; Maren Scheuner, MD, VA Greater Los Angeles & RAND

Abstract:

Background: Clinicians lack knowledge about and confidence in basic clinical genetic principles and activities. The purpose of this study is to bring education and tools to primary care clinicians that are designed to improve family history documentation and referrals for genetic consultation. The implementation intervention is comprised of informational (CME-approved lectures, website), clinical (patient-administered family history questionnaire, reminder and family history template in the electronic health record (EHR), and patient and provider information sheets) and behavioral (practice-feedback reports describing use of EHR reminder and referrals) components.

Methods: This pilot study targets primary care clinicians at the Women's Clinics at the VA Greater Los Angeles Healthcare System. Six and 18 months after implementation, semi-structured interviews were conducted to assess seven clinicians' perceptions of the program components. Provider feedback on each component was compared and contrasted using constant comparison method.

Results: At both timepoints, clinicians reported that their confidence with regard to performing familial risk assessment and completing appropriate genetic referrals has improved. Clinicians described the self-administered family history questionnaire as valuable because it provided patients the opportunity to document their family histories while in the waiting room, thereby reducing time spent on family history during clinic visits. All of the clinicians used the EHR family history reminder and template. They found it easy to navigate and appreciated the structured approach to documenting family history. All of the clinicians had made at least one referral for a genetic consultation and commented that this facilitated process was very straightforward. There was considerable variability among the clinicians regarding the practice feedback report: some clinicians never utilized the report, while others used it to increase their family history documentation. Clinicians preferred electronically available information over information sheets. Clinicians rarely visited the website, primarily due to time constraints.

Conclusions: This multi-component approach to cancer genetics education for primary care clinicians was successful in improving comprehensive family history documentation. Some aspects of the implementation intervention were more salient than others, with the electronic clinical template itself remaining the preferred tool.

13. THE ROLE OF PRACTICE-BASED RESEARCH NETWORKS IN COMPARATIVE EFFECTIVENESS RESEARCH

Primary Contact/Presenter:

Daniel Hartung, PharmD, MPH
Assistant Professor
Oregon Health & Science University
3303 SW Bond Avenue
CH12C
Portland, OR 97329
Tel: 503-494-4720
hartungd@ohsu.edu

Co-Authors:

Jeanne-Marie Guise, MD, MPH; Lyle J. Fagnan, MD; Melinda M. Davis, PhD, OHSU;
Kurt C. Stange, MD, PhD, Case Western Reserve University

Abstract:

Background: Comparative effectiveness research (CER) fundamentally reorients how clinical evidence is generated and used with the goal of providing actionable information to decision makers. To achieve this, it is vital that decision makers and the research enterprise are engaged from question inception, to evidence generation, and translation. Practice-based Research Networks (PBRNs) are affiliated clinics in diverse communities with the goal of conducting research to improve care and have potential to advance CER in all phases of the research cycle.

Objective: To better understand how the PBRN community views their role in CER, we conducted a short survey of AHRQ affiliated PBRN directors.

Methods: The survey was distributed electronically to 118 directors through the AHRQ PBRN Resource Center listserv of primary care networks. The survey was conducted between 7/26/2011 and 8/12/11 and contained six questions exploring directors' knowledge, interest, and perception of CER within their PBRN.

Findings: The response rate was 42% (49 /118). Over half (53%) of all directors reported engagement with an affiliated Clinical and Translational Science Award (CTSA) center. While over 90% of directors perceived CER to be somewhat or very important to their PBRN, only one quarter of respondents indicted current or planned work in the area. 80% -90% of directors reported moderate or extreme interest in observational or health services research, dissemination studies, and research supporting informed or shared decision making. PBRNs with CTSA engagement were significantly more likely to be interested in dissemination research compared to non-CTSA affiliated PBRNs (100% versus 74%, $p<0.05$). Funding was identified as the most important barrier to conducting CER within their PBRN.

Conclusions: PBRNs are well positioned to make meaningful contributions to the conduct and dissemination of CER. While barriers were identified, responses from Directors confirm a synergistic potential between PBRNs and CTSAs in the area of CER.

Daniel Hartung is supported by a K12 career development award in comparative effectiveness research

14. CANADIAN INTENSIVE CARE UNIT PHYSICIANS' PERCEPTIONS ABOUT THEIR TRANSFUSION BEHAVIOUR: A QUALITATIVE STUDY USING THE THEORETICAL DOMAINS FRAMEWORK

Primary Contact/Presenter:

Rafat Islam, PhD
Senior Research Associate
Ottawa Hospital Research Institute, Civic Campus
1053 Carling Avenue
Ottowa, ON K1Y4E9
Tel: 613-798-5555
rislam@ohri.ca

Co-Authors:

Alan Tinmouth, MD, Ottawa Hospital Research Institute; Jill Francis, PhD, University of Aberdeen; Jamie Brehaut, PhD, University of Ottawa; Jennifer Born, MSc, Ottawa Hospital Research Institute, Ottawa; Charlotte Stockton, PhD, University Hospital of South Manchester; Simon Stanworth, MD, University of Oxford, UK; Martin Eccles, MD, Newcastle University, UK; Brian Cuthbertson, MD, Sunnybrook Health Sciences Centre; Chris Hyde, University of Oxford, UK; Jeremy Grimshaw, MBChB, PhD, Ottawa Hospital Research Institute

Abstract:

Introduction: Evidence of variations in transfusion practices have been reported in a wide range of clinical settings. Interventions to change clinical practice require understanding of the target clinical behaviours in real world settings. We undertook a study in Canadian intensive care physicians to identify potential barriers and enablers of transfusion behaviour 'watching and waiting instead of transfusing red blood cells' to design an intervention using 'theoretical domains framework' (TDF), a structure based on commonly used psychological theories of behaviour change.

Method: Ten ICU physicians throughout Canada were interviewed using an interview topic guide based on 12 theoretical domains. Physicians' utterances were coded into theoretical domains independently by two coders. Within each domain, utterances were coded into specific beliefs. Domains relevant to behaviour change were identified based on frequencies in interview transcripts and content suggesting a problem and/or influence of the beliefs on the target behaviour. Constructs from the relevant domains were mapped to select psychological theories for further study.

Findings: Seven theoretical domains populated by 31 specific beliefs were identified as relevant to the target behaviour. The domains Knowledge; Social/professional role and identity; Beliefs about capabilities; Beliefs about consequences; Motivation and goals; Social influences; and Behavioural regulation domains were identified for mapping onto psychological theories and models. The Theory of Planned Behaviour, Social Cognitive Theory, Operant Learning Theory, Action Planning, Personal Project Analysis and intuitive 'Knowledge-Attitude-Behaviour' model were identified as potentially relevant theories and models.

Conclusions: Using the TDF, a wide range of factors was identified as likely to influence Canadian ICU physicians' transfusion behaviour. We were able to map relevant domains to select psychological theories for further study. This approach identifies targets for behaviour change techniques that could be used to change physicians' transfusion behaviour.

15. FACTORS AFFECTING IMPLEMENTATION OF AUTOMATED CLINICAL AUDIT AND FEEDBACK IN MALAWI

Primary Contact/Presenter:

Zach Landis-Lewis, MS
PhD Student
University of Pittsburgh
Department of Biomedical Informatics
Parkvale Building M-183
200 Meyran Avenue
Pittsburgh, PA 15260
Tel: 412-708-2671
zach.ll@gmail.com

Co-Authors:

Rebecca S. Crowley, MD, MS; Gerald P. Douglas, PhD, University of Pittsburgh Department of Biomedical Informatics, Center for Health Informatics for the Underserved; Oliver J. Gadabu, BSc, Baobab Health Trust, Malawi

Abstract:

Healthcare worker (HCW) performance in low-resource settings is frequently below the standards of care recommended in simplified clinical practice guidelines (SCPGs), leading to millions of unnecessary deaths each year. Performance, defined as adherence to a standard, depends upon appropriate training and continuous learning. Training interventions to improve HCW performance are based on SCPGs that standardize delivery of healthcare. Once training is complete, HCWs have few opportunities to maintain their knowledge through continuous learning by, for example, receiving feedback that reinforces new guideline-based knowledge. A barrier to the provision of feedback in low-resource settings is human resource shortages. However, the increased use of Electronic Medical Record (EMR) systems in low-income countries is creating new opportunities to generate automated feedback that can support learning, thereby improving HCW performance. The objective of this study is to identify HCW perceptions and contextual factors affecting the implementation of an automated clinical audit and feedback system for use in Malawi. In our first aim we determined the feasibility of using EMR data to generate automated feedback for 21 recommendations from Malawi's national guideline for AIDS treatment. Our next aims are (1) to identify HCW perceptions and contextual factors affecting implementation of automated audit and feedback in Malawi using open-ended interviews and observations and (2) to develop and pilot a prototype automated audit and feedback system using participatory design methods. This study will advance the field of D&I by improving understanding of barriers and supports for implementation of automated clinical audit and feedback during a system pilot in a low-resource setting. This work will extend the existing healthcare infrastructure in Malawi to provide routine feedback by re-using EMR data at low-cost to the healthcare organization. Our goal is to enable supportive supervision to improve guideline-based healthcare in low-resource settings. Funding provided by NLM Training Grant #5T15LM007059-22.

16. DISSEMINATING CURRENT INFORMATION: A COMPARISON OF STANDARD VS. INTERACTIVE APPROACHES TO INCREASE RESPONSE RATES TO ANNUAL UPDATE REQUESTS

Primary Contact:

Paula Darby Lipman, PhD
Senior Study Director
Westat
1650 Research Boulevard
Rockville, MD 20850
Tel: 301-279-4555
paulalipman@westat.com

Presenting Author:

Mary Masters, MSPH, MS, Westat

Co-Authors:

Paula Darby Lipman, PhD; Wendy Lee, MD, MPH, Westat

Abstract:

Objective: The purpose of the web-based inventory of research networks, developed in 2005 for the NIH Inventory and Evaluation of Clinical Research Networks (IECRN) project, was to provide a resource for investigators to identify potential collaborators from 320 networks with network profiles. To join, members completed a survey on network mission, funding, study designs, locations, and affiliated organizations. Updates were requested annually via email, presumed to be effective for engaging researchers. A decline in response rates led Westat to design a study to compare an interactive, personal approach to the annual update to the standard email approach.

Methods: Networks eligible for update (N = 126) were randomly assigned to the standard or interactive approach, with differences in content of the first email and non-response follow-up. Initial emails contained instructions for updating network profile information; the interactive group's email was intended to be more engaging by 1) inviting the respondent to describe their collaborations, 2) expressing appreciation, and 2) including the name and signature of the sender who indicated she would follow up personally (by telephone).

Findings: Chi-square tests were conducted to examine differences in response rate by follow-up approach (standard vs. interactive), type of network (clinical trials vs. others), wave of follow-up, and number of years since last update. Networks that did respond either verified the content, provided updated information, or reported that the network had disbanded. Networks in the interactive group were significantly ($p < 0.001$) more likely to respond to each wave of follow-up regardless of type of network or years since last update.

Supported by: National Center for Research Resources and National Heart, Lung, and Blood Institute, National Institutes of Health, Contract No. N01-HC-45209.

17. FACTORS ASSOCIATED WITH THE USE OF APPROVED TOBACCO CESSATION PROGRAMS IN CALIFORNIA SCHOOLS

Primary Contact/Presenter:

Melissa Little, MPH
Doctoral Candidate
University of Southern California
3950 Kalai Waa Street
Unit C201
Kihei, HI 96753
Tel: 323-620-1114
melissa.gunning@gmail.com

Co-Authors:

Louise Ann Rohrbach, MPH, PhD; Steve Sussman, PhD, University of Southern California

Abstract:

In contrast to previous years of decline, the prevalence of tobacco use among adolescents in California is increasing. In order to reverse these trends, a comprehensive approach to tobacco control among adolescents is needed. School-based tobacco cessation programming is an integral part of this approach, however at present, little is known about how and why schools adopt and implement tobacco cessation programs. These findings suggest that a significant gap remains in what we know about how to effectively "translate" evidence-based programs from research to practice. The purpose of this research is to explore the socio-ecological factors that influence the implementation of approved tobacco cessation programs in schools.

Data used for this study comes from a cross-sectional survey of 235 California school district administrators and county office of education Tobacco Use Prevention Education (TUPE) coordinators surveyed during 2011 via a web-based survey. We employed hierarchical regression analyses to examine the relationships between funding, community characteristics, organizational factors, and beliefs about tobacco use prevention strategies, with the dependent variable implementation of an approved tobacco cessation program. To avoid excessive parameters, variables not reaching $p<.05$ were dropped from subsequent analyses.

Organizations that reported implementing an approved tobacco cessation program believed that tobacco use was a problem facing their community, were larger in size, had previously and were currently receiving TUPE funds, had an organizational mandate to use a tobacco cessation program, had a program champion, and had more coordinator effort devoted to tobacco programming (p's $<.05$) compared to organizations that did not implement an approved cessation program. Findings support a multi-level ecological approach to the study of implementation of tobacco cessation programs in schools. These results should be used to inform policies that affect school districts' use of tobacco cessation programming, which will ultimately lead to reductions in negative health outcomes among adolescents.

Acknowledgements: This study was funded by a grant from the Tobacco-Related Disease Research Program (no. 19DT-0002).

18. GROUP BASED IMPLEMENTATION LEARNING MODELS: A SYSTEMATIC LITERATURE REVIEW

Primary Contact/Presenter:

Erum Nadeem, PhD
Assistant Professor
Columbia University/NYSPI
100 Haven Aveune 31D
New York, NY 11238
Tel: 212-342-0439
nadeeme@nyspi.columbia.edu

Co-Authors:

Nadeem, E., Olin, S., Hill, L., Horwitz, S., Wisdom, J.,& Hoagwood, K.

Abstract:

Problem: As large mental health systems scale-up evidence-based practices and innovations, there has been growing interest in the use of Learning Collaboratives (LCs) and similar models to disseminate and implement new practices. One prominent model is the Institute for Healthcare Improvement's Breakthrough Series Collaborative (IHI, 2003), which has been adapted for implementation of a range of practices. To date, LCs and similar models have been inconsistently described in the literature. We conducted a systematic review to identify: (1) components common to LCs and other Group-based Implementation Learning Models (GILMs) in health, mental health, and education; (2) characterize the focus and methods used in such studies, and (3) evaluate the existing evidence on provider and patient-level outcomes.

Methods: We conducted a systematic review of the literature to understand GILMs and their use in dissemination and implementation. Specifically, we: 1) defined the scope of our search within the realm of GILMs, 2) set inclusion and exclusion criteria, 3) extracted and synthesized articles relevant to our review goals, 4) appraised the quality of the evidence, and 5) made recommendations for future research.

Findings: We describe specific components to GILMs that emerge from our review of the existing literature in health, mental health, and education, identifying 20 cross-cutting components (e.g., organizational focus, leadership engagement, support for frontline staff, use of local evidence, and feedback). In addition, we identified a range of study designs (e.g., qualitative case studies, pre-post outcome studies, RCTs) to test the efficacy of GILMs in disseminating new practices. Studies addressed experiences of GILM participants, perceptions of active components, and provider and patient outcomes. However, the number of high quality studies examining impact on provider practice and patient outcomes is limited, raising the need for substantial future research in this area.

This research was funded by the National Institutes of Health (P30MH090322).

These findings advance the field of dissemination and implementation research by identifying core components of common implementation models used.

19. VALIDATING THE INDIVIDUAL PLACEMENT AND SUPPORT FIDELITY SCALE

Primary Contact/Presenter:

Alison Peterson, MPH
Data Analyst
Dartmouth Psychiatric Research Center
Rivermill Commercial Center
85 Mechanic Street
Suite B4-1
Lebanon, NH 03766
Tel: 603-448-0263
peterson10@dartmouth.edu

Co-Author:

Gary R. Bond, PhD, Dartmouth Psychiatric Research Center

Abstract:

Introduction: Individual Placement and Support (IPS) is an evidence-based model of supported employment for people with severe mental illness (schizophrenia and severe mood disorders). It is considered one of the most robust service interventions available for this population. To assess adherence to the IPS model, a fidelity scale called the IPS-15 was designed and has been validated. An expanded and revised version of this scale, the IPS-25, was developed and has been widely adopted. The goal of this project was to test the reliability and predictive validity of the IPS-25.

Methods: Seventy-nine IPS sites across eight states submitted fidelity assessment scores and quarterly employment rates, defined as the proportion of active clients that worked at least one day in the calendar quarter, to the research team. This information was merged with unemployment data for each site's local area published by the Bureau of Labor Statistics. Pearson's correlations and stepwise multiple regression were used to examine the fidelity-outcome relationship.

Findings: Total scores on the IPS-25 ranged from 56 to 123, nearly the scale's full range. The IPS-125 was internally consistent (Cronbach's alpha =.88), and IPS-25 fidelity was significantly correlated with quarterly employment rates ($r = .34$; $p < .001$). Stepwise multiple regression revealed that the fidelity-outcome relationship is not substantively affected by local unemployment rate.

Conclusions: The IPS-25 is reliable and predicts positive employment outcomes. The fidelity scale is an example of a tool that motivates evidence-based quality improvement through a positive association between high fidelity scores and a desired outcome.

Funded by The New Hampshire Public Health Training Center Program through the Health Resources Services Administration under Health and Human Services.

20. INSTRUMENT DEVELOPMENT, DATA COLLECTION, AND CHARACTERISTICS OF PRACTICES, STAFF AND MEASURES IN THE IMPROVING QUALITY OF CARE IN DIABETES STUDY

Primary Contact/Presenter:

Justin Presseau, PhD
Research Associate
Institute of Health and Society Newcastle University
Baddiley-Clark Building
Richardson Road
Newcastle Upon Tyne NE2 4AX
Tel: +44 (0)191 222 3544
justin.presseau@ncl.ac.uk

Co-Authors:

Martin P. Eccles, MD, FMedSci, FRCP, FRCGP, FFPHM; Gillian Hawthorne, MRCP, PhD, FRCP; Nick Steen, PhD; Margaret Hunter; Elaine Stamp, MSc; Susan Hrisos, MPhil, Newcastle University; Jeremy M. Grimshaw, PhD, FRCGP, University of Ottawa; Jill J. Francis, PhD, University of Aberdeen; Marie Johnston, PhD, University of Aberdeen; Marko Elovainio, PhD, National Institute for Health and Welfare

Abstract:

Background: In the UK, implementing high quality diabetes care involves the behavior of clinical and administrative members of primary care teams. This poster describes the development, recruitment, and descriptive results of a study investigating the structural, organizational and individual level processes involved in implementing evidence-based diabetes care.

Methods: This was a 12-month predictive study involving 99 general practices in the UK including administrative staff and clinical staff (family doctors and nurses). We identified six guideline-recommended clinical behaviors: prescribing (to reduce blood pressure and for glycemic control), advising (about weight, self-management and general education) and examining feet. Structural attributes of practices, and a range of constructs from organizational and individual theories were measured at baseline using telephone interview and postal questionnaires. Self-reported and objectively recorded measures of clinical outcome were collected over the ensuing 12 months, from clinicians, clinical data extraction query and patient reports of clinicians' behavior.

Findings: All practices completed a telephone interview and responded to baseline questionnaires. The organizational-theory portion of the questionnaire was completed by 931/1236 (75.3%) administrative staff, 423/529 (80.0%) doctors, and 255/314 (81.2%) nurses. The individual-theory portion of the questionnaire was completed by 326/361 (90.3%) doctors and 163/186 (87.6%) nurses. We achieved response rates of 100% from clinicians in 40 practices and > 80% from clinicians in 67 practices. All theory-based measures had satisfactory internal consistency. Mean scores on theory-based measures were positive and all above scale midpoints, indicating perceptions about the organization and the behaviors that were generally consistent with good practice. Measures of clinician behavior showed relatively high rates of performance across the six behaviors, but with considerable variability within and across the behaviors and measures.

Advancement: This study provides an unprecedented description of the structural, organizational and individual psychological processes involved in implementing high quality diabetes care.

21. DANDELION EFFECT OF A TEAM TRAINING PROGRAM TO ENHANCE PATIENT SAFETY AND QUALITY

Primary Contact:

Frank Puga, PhD
Research Scientist
University of Texas Health Science Center San Antonio
7703 Floyd Curl Drive
Mail Code 7949
San Antonio, TX 78229
Tel: 210-567-5846
pugaf@uthscsa.edu

Presenter:

Kathleen R. Stevens, RN, EdD, ANEF, FAAN

Co-Authors:

Michael Corneille, MD; Frank Puga, PhD

Abstract:

Problem: Inadequate communication is the largest contributing factor to the occurrence of errors and near misses in healthcare. Thus, effective interprofessional teamwork in healthcare is essential to patient safety. In response to this need, multiple government agencies produced a standardized team training program based on best evidence: Team Strategies to Enhance Performance and Patient Safety (TeamSTEPPS™). Until now there has been no systematic TeamSTEPPS™ implementation in the University of Texas System and State of Texas. The aims of this project were:

1. To establish sustainable education programs and resources for TeamSTEPPS™ training in academic programs and clinical services.
2. Sustain and spread TeamSTEPPS™ training by making TeamSTEPPS™ training resources, developed through this project this project, broadly accessible via community engagement.
3. Evaluate and document the spread of TeamSTEPPS™ and its effects on team performance and patient safety.

Methods: Master Training sessions were held between 2009 and 2011. Participants in these workshops consisted of healthcare professionals from multiple disciplines across education and clinical agencies. Following Kirkpatrick's model for evaluation, mixed-methods were used to analyze the spread and impact of the local TeamSTEPPS™ Master Trainer sessions. Measures of success for this project included the spread of quality improvement projects and educational programs involving TeamSTEPPS™.

Findings: Master Training sessions resulted in a cadre of 110 master trainers. Master Trained individuals went on teach other Master Training sessions (20%), implement fundamental concepts into curriculum (5%), and develop training initiatives and quality improvement projects in local hospitals and ambulatory clinics (40%).

Impact on Dissemination & Implementation: Through well-placed resources from University of Texas System, this project produced anticipated and unanticipated spread of the standardized team performance training. The unanticipated spread dubbed the 'dandelion effect' represents sustainability and dissemination of an evidence-based program aimed at improving patient safety.

This work is funded by grant from the University of Texas Healthcare Safety and Effectiveness Grants Program

References

1. Institute of Medicine (IOM). (2000). *To Err is Human: Building a Safer Health System*. National Academy Press (NAP).
2. Kirkpatrick, DL (2006). *Evaluation Training Programs: The Four Levels.* 3rd Ed. San Francisco: Berrett-Koehler Publishers.

22. THE DEVELOPMENT OF A ROLE-PLAY COMPETENCY MEASURE TO EVALUATE OUTCOMES OF A BEHAVIORAL ACTIVATION ONLINE TRAINING

Primary Contact/Presenter:

Ajeng Puspitasari, BA
Graduate Student
University of Wisconsin-Milwaukee
1580 N. Farwell Avenue
Apartment 2A
Milwaukee, WI 53202
Tel: 414-229-5078
ajp@uwm.edu

Co-Authors:

Alex S. Crowe, BA; Gabriela A. Nagy, BA; Jonathan W. Kanter, PhD, University of Wisconsin-Milwaukee; Kelly Koerner, PhD, PracticeGround

Abstract:

Increased focus on the dissemination of evidence-based treatments (EBTs) requires strategies for measuring training outcomes that work in real world settings. For example, Behavioral Activation (BA), an EBT for depression, holds promise as an easy-to-train and disseminate treatment, but there is no research on changes in therapist competency after BA trainings. Typically, trainees' changes in competency have been measured via self-report or expensive and impractical coding of taped therapy sessions. More objective and feasible measures of competency are still needed. This presentation reports on two studies to develop a BA role play scenario measure to assess trainees' competency before and after receiving an online BA training. The role play assessment has the advantages that it prompts the specific skills delivered in training, it does not require taped therapy sessions, and it can be completed online or over the phone with a trained rater. The BA training consisted of four 1 ½ hour sessions spaced two weeks apart with the first study involved 9 participants and the second involved 8 participants. Each participant went through a 1.5 hour role play assessment pre- and post-training where they were prompted to deliver four main BA skills to a standardized hypothetical client. All recordings were coded by three coders and twelve randomly chosen recordings were coded by a BA-expert coder. Outcomes for the first 9 participants suggested a significant gain in observed BA competency from pre- to post-training, $t(8) = 5.39$, $p < .001$. A high inter-rater reliability between the three non-BA expert coders was achieved with ICC higher than .90. Data from the second training and reliability scores between BA-expert coder and non-expert coder will be reported. This study provides initial support for the feasibility, reliability and validity of a BA role-play scenario measure to assess competency as an indicator of training outcome.

23. THE IMPACT OF TEACHER AND CLASSROOM LEVEL CHARACTERISTICS ON THE FIDELITY OF IMPLEMENTATION OF AN EVIDENCE-BASED INTERVENTION FOR STUDENTS WITH ASD

Primary Contact/Presenter:

Erica Reisinger, MSEd
Research Coordinator
Perelman School of Medicine
University of Pennsylvania
3535 Market Street
CMHPSR, 3rd Floor
Philadelphia, PA 19104
Tel: 215-573-8472
ereis@upenn.edu

Co-Authors:

Erica Reisinger, MSEd; Ming Xie, MS, University of Pennsylvania; Aubyn Stahmer, PhD, Rady Children's Hospital, UCSD; David Mandell, PhD, University of Pennsylvania, Center for Autism Research

Abstract:

Objective: This study examined teacher and classroom-level determinants of implementation of a comprehensive intervention for children with ASD in the School District of Philadelphia, a district ranked among the top 10 largest districts in the nation and one that serves a racially and economically diverse sample of children.

Methods: Fifty-four kindergarten-through-second grade autism support classroom teachers were the subjects for this study. Teachers received training in an evidence-based program for students with autism. Teachers attended didactic training eight times during the year and received in-class consultation from a coach twice per month.

Teacher characteristics were evaluated at multiple points over the year. The Maslach Burnout Inventory (MBI) was administered to teachers at the beginning and end of the school year to determine work-related stress. The teachers also completed satisfaction surveys on the intervention, trainings, and their coaches. The teachers provided demographic information on themselves, which included information on certifications and teaching experience.

General classroom- level data was collected on the number of support staff and students in the classroom, as well as the presence of students who present with challenging behaviors. Program fidelity was monitored through monthly program fidelity checks by research staff and coaches, with an inter-rater reliability of at least 80%.

Findings: Data collection is complete and analyses are underway. Analyses will examine the moderating role of teacher and classroom characteristics on the implementation of the intervention in the classroom.

Contributions to the field of Dissemination and Implementation: This research is relevant to the field of dissemination and implementation because it illustrates how an evidence-based intervention can be implemented in large-scale public settings, and how an intervention is sustained with fidelity in a setting where there are many barriers to care.

24. LONGITUDINAL ANALYSIS TO ASSESS IMPLEMENTATION OF MEDICATION ASSISTED TREATMENT FOR SUBSTANCE USE DISORDERS

Primary Contact/Presenter:

Traci Rieckmann, PhD
Assistant Professor
Oregon Health & Science University
3181 SW Sam Jackson Park Road
Portland, OR 97239
Tel: 503-494-6739
rieckman@ohsu.edu

Co-Author:

Amanda Abraham, PhD, Owens Institute for Behavioral Research, University of Georgia

Abstract:

Problem: A wealth of evidence supporting the use of medication-assisted treatments (buprenorphine, tablet naltrexone and acamprosate) for the treatment of substance use disorders continues to build, yet overall uptake of these medications remains weak. Research indicates that multiple factors both hinder and facilitate implementation of medication-assisted treatment (MAT) including perceptions of the innovation, characteristics of those who adopt (or don't adopt), organizational and contextual factors such as agency size, treatment philosophy, incentives, leadership, and type of funding source. What remains unclear is the impact of such factors on the implementation of MAT overtime which cannot be determined with cross-sectional studies.

Methods: This study uses a national longitudinal data set (National Treatment Center Study) to examine the influence of organizational and counselor factors on adoption of MAT overtime. Data were collected via face-to-face interviews in three waves (2002-2004; 2004-2006; 2008-2009) from programs participating in the National Drug Abuse Treatment Clinical Trials Network (CTN) (N=133). This study used Generalized Estimating Equations (GEE), a statistical procedure for longitudinal datasets. Superior to other techniques, GEE models determine significance of independent variables (organization and counselor factors) in predicting odds of adopting each medication over time.

Findings and Conclusions: GEE models showed that higher levels of education among counselors were associated with the adoption of tablet naltrexone, buprenorphine, and acamprosate overtime. The odds of adopting buprenorphine and tablet naltrexone were also greater for accredited programs. Programs that received a higher percentage of their revenue from private insurance were more likely to use tablet naltrexone overtime. Results also showed that use of buprenorphine and acamprosate increased significantly over the study period. Examination of organization and counselor level variables overtime provides a framework of critical implementation elements necessary for sustained use of these innovative substance abuse treatment options.

25. TOBACCO QUITLINE & FOOD STAMPS PARTNERSHIP: A CASE STUDY TO DISSEMINATE AN EVIDENCE-BASED SMOKING CESSATION PROGRAM TO AN AT-RISK POPULATION

Primary Contact/Presenter:

Erin Robinson, MSW
Data Coordinator
Health Communication Research Laboratory
Washington University in St. Louis
700 Rosedale Avenue
Campus Box 1009
St. Louis, MO 63130
Tel: 314-935-3717
erobinson@gwbmail.wustl.edu

Co-Authors:

Matthew Kreuter, PhD, MPH; Chris Casey, MPH; Charlene Caburnay, PhD, MPH; Christine Stavridis, BFA; Katie Garland, BA, Health Communication Research Laboratory, Washington University in St. Louis

Abstract:

Smoking has become a class-based disparity in the U.S. In 2009 we surveyed St. Louis Food Stamp recipients (n=685) and found a smoking prevalence of over 40%. Of these smokers, 80% reported they are considering quitting. However, only 33% were aware of the Missouri Tobacco Quitline, an evidence-based program that provides counseling and quit smoking aids to callers, and only 2% have ever called.

This study sought to partner the Missouri Department of Health and Senior Services and the Family Support Division (FSD), to disseminate an evidence-based program to those most at-risk to smoke. These government agencies administer the Quitline and Food Stamps programs respectively, yet had never collaborated to address health issues. Based on audience research with Food Stamp recipients, a 3-step review with FSD and Quitline leadership, and key informant interviews (n=4) with FSD managers, a series of Quitline referral materials were developed for display at state FSD offices. FSD managers (n=50) who oversee county-level offices and have direct access to recipients were encouraged by FSD leadership to adopt these materials. After four weeks, we reached 100% participation and disseminated materials (n=218 displays) to every FSD office in Missouri (n=120). Site visits will provide data on the adoption and implementation of the materials and the degree to which they were integrated into current services provided. In addition, Quitline pre- and post- call frequency will be measured, as well as Quitline callers' self-reported referrals.

This study provides a case study of how separate government agencies can collaborate to disseminate an evidence-based smoking cessation program to an in-need population. Based on findings, future D&I research could identify other mutually beneficial partnerships that have potential to reach a greater number of individuals than singular efforts.

Funding was provided through the NCI Centers of Excellence in Cancer Communication Research program (P50-CA095815).

26. PARIHS AS A THEORETICAL FRAMEWORK FOR IMPLEMENTATION SCIENCE RESEARCH

Primary Contact/Presenter:

Anju Sahay, PhD
Implementation Health Science Specialist
Department of Veterans Affairs
3801 Miranda Avenue (182B)
Palo Alto, CA 94304
Tel: 650-493-5000
anju.sahay@va.gov

Co-Authors:

Cheryl Stetler, RN, PhD; Jeffrey Smith, PhD; Philip Ullrich, PhD, Department of Veterans Affairs

Abstract:

Problem: The Promoting Action on Research Implementation in Health Services (PARIHS) conceptual framework is posited as useful for guiding design of implementation studies. The Department of Veterans Affairs' (VA) QUERI program initiated the "PARIHS Development Initiative" (PDI) to accelerate our collective learning about this framework, including its potential usefulness/ limitations, and to model exploration of implementation theories in general. PDI aimed to leverage combined experiences and knowledge available throughout QUERI regarding PARIHS to enhance our related understanding and guide its practical use.

Methods: A structured qualitative process was used to explore use of PARIHS, as well as use of theory in general. Documentation tools were developed to examine QUERI reports and publications. Structured phone interviews were conducted using reflective exploration methods with QUERI researchers. Interview and documentation notes were forwarded to participants for affirmation/clarifications. Based on final affirmation documents, step-wise content analysis and summaries were conducted across sources, foci and Centers to develop themes, all of which were iteratively refined and affirmed through consensus.

Findings: Findings demonstrate that theories have been increasingly used over time within QUERI, at both a macro and specific level; i.e., use ranged from providing general insights to directing specific aspects of individual projects, such as measurement. PARIHS was selected by QUERIs for reasons such as its logical, sensible appeal, and used to provide general guidance regarding implementation as well as directly inform assessment/measurement, intervention planning and analysis. Perceived strengths and limitations, along with challenges related to PARIHS use, were identified, reflecting and expanding upon the PDI's PARIHS synthesis.

Contribution: Implementation science theories, including PARIHS, are serving many functions for QUERI Centers, from provision of general insights for implementation programs to specific guidance on development and assessment of individual projects. This knowledge provides QUERI and other researchers' concrete information about general use of theory and specifically about PARIHS.

Funding: This research was supported by the US Department of Veterans Affairs QUERI program.

27. USE OF INTERNAL AND EXTERNAL FACILITATORS FOR THE IMPLEMENTATION THE VA HOSPITAL-TO-HOME (H2H) INITIATIVE: CHRONIC HEART FAILURE (CHF) QUERI

Primary Contact/Presenter:

Anju Sahay, PhD
Implementation Health Science Specialist
Department of Veterans Affairs
3801 Miranda Avenue (182B)
Palo Alto, CA 94304
Tel: 650-493-5000
anju.sahay@va.gov

Co-Authors:

Parisa Gholami, MPH; Paul A Heidenreich, MD, MS, Department of Veterans Affairs

Abstract:

Problem: Reducing readmission rates for heart failure (HF) patients is the primary goal of the Department of Veterans Affairs (VA) and its CHF QUERI. According to Rogers' Diffusion of Innovation Theory (2003) social networks significantly affect performance and innovation. Additionally, the Promoting Action on Research Implementation in Health Services (PARIHS, 2008) framework emphasizes the function of dynamic relationships among evidence, context and facilitation. In January 2010 the CHF QUERI through its HF Network launched the "VA H2H" QI initiative to implement the national H2H initiative at the VA facilities. External facilitators (HF Network's leadership) and internal facilitators (opinion leaders (OLs) at each facility) were used to implement the VA H2H initiative.

Methods: A total of 122 VA facilities were identified with >100 discharges during 2007-2008. Using the sociometric method OLs were identified to be "internal" facilitators. Members were to nominate up to 2 providers at own facility (physician/nurse/other/self) as the OL. Then OL teams were asked to participate in the VA H2H. External facilitators conducted web-based meetings, provided tool-kit and consultation to members at all 122 facilities. Periodic surveys were used to track projects recently initiated and/or planned based on VA H2H, or ongoing to reduce HF readmissions not based on VA H2H initiative.

Findings: Members from 66% facilities (n=81) responded with 1-2 nominations for OLs. Members from the remaining 34% facilities (n=41) either responded with no nominations (n=3) or were non-responders (n=38). Overall, 47 facilities (39%) reported a total of 243 projects. Among them, 44 facilities had OLs (94%) with 234 projects (96%) and the remaining 3 facilities (6%) with no OL had only 9 projects (4%).

Contribution: Facilities with OLs were very successful in implementing the VA H2H initiative. Use of OLs may be effective in implementing non-mandated QI initiatives to improve care for all VA HF patients.

Funding: This research was supported by the US Department of Veterans Affairs QUERI program.

28. RELIABILITY AND VALIDITY OF THE COACH FIDELITY OF IMPLEMENTATION RATING SYSTEM FOR THE FAMILY CHECK-UP INTERVENTION AND PREVENTION MODEL

Primary Contact/Presenter:

Justin Smith, PhD
Postdoctoral Research Scholar
Child and Family Center
University of Oregon
195 West 12th Avenue
Eugene, OR 97401
Tel: 541-346-0752
jdsmith6@uoregon.edu

Co-Authors:

Thomas J. Dishion, PhD, Child and Family Center University of Oregon and Arizona State University; Daniel S. Shaw, PhD, University of Pittsburgh; Melvin N. Wilson, PhD, University of Virginia

Abstract:

Measuring and ensuring treatment fidelity is key to successful implementation of evidence-supported treatments. In this study, we present the reliability and validity of a recently developed observational coding system, the COACH (Dishion, Knutson, Gill, Risso, & Brauer, 2010), which was developed to assess the fidelity of implementation of the Family Check-Up (FCU; Dishion & Stormshak, 2007).

The FCU is an evidence-supported intervention and prevention program built on the success of earlier parent training programs. The system assesses therapist-client interactions on five dimensions: 1) Conceptual understanding of the model, 2) Observant and responsive to client needs, 3) Actively structuring sessions, 4) Careful and appropriate teaching, and 5) Hope and motivation inducing. The COACH had an overall ICC of 0.67. In a subsample of 79 distressed families participating in a larger multi-site intervention trial (The Early Steps Project), path analysis indicated that greater treatment fidelity to the FCU results in greater observed caregiver engagement in the feedback session, which is an intervening variable in the relationship between treatment fidelity and improvements in caregivers' positive behavior support (PBS) one year later (β=0.11, p-value<.05). PBS is a latent construct comprised of four validated observational measures of parenting and it has been found to mediate the relationship between participation in the FCU and improvements in child externalizing problems (Dishion et al., 2008). This study builds on the earlier work of Forgatch, Degarmo, and colleagues (2003, 2005), whose Fidelity of Implementation Rating System, upon which the COACH was based, was also found to be associated with improvements in the quality of observed parenting practices one year later. These findings support the need for validated measures of fidelity of implementation and the validity of the COACH rating system. COACH ratings from an ongoing implementation study of the FCU in community mental health agencies will also be presented.

29. A NARRATIVE REVIEW AND SYNTHESIS OF FRAMEWORKS IN DISSEMINATION AND IMPLEMENTATION RESEARCH

Primary Contact/Presenter:

Rachel Tabak, PhD
Postdoctoral Research Associate
Prevention Research Center in St. Louis
660 S. Euclid
Campus Box 8109
St. Louis, MO 63110
Tel: 314-362-9653
rtabak@gwbmail.wustl.edu

Co-Authors:

Elaine Khoong, BS; Ross Brownson, PhD, Prevention Research Center in St. Louis; David Chambers, PhD, National Institute of Mental Health

Abstract:

Objective: Theories and frameworks (hereafter referred to as models) are necessary for quality dissemination and implementation (D&I) research; however, there is currently no organized collection of these models. We aim to address this gap by: 1) developing an inventory of models used in D&I work; 2) synthesizing this information; and 3) providing guidance on how to select the appropriate model to inform study design.

Methods: This narrative review used snowball sampling to collect models from journal articles, presentations, and books. Models were categorized based on three author-defined variables: construct flexibility (CF), focus on dissemination versus implementation activities (D/I), and socio-ecological framework (SEF) level. A model's CF was rated as broad to operational on a five-point scale. Models were also categorized on a five-point scale as dissemination-focused to implementation-focused. All SEF levels (system, community, organization, and individual) to which a model could be applied were also extracted. Models that addressed policy activities were noted.

Findings: Sixty-one models were included in this review. At least four models were classified into each of the five categories within the CF and D/I scales. Models were distributed across all levels of the SEF; 59 models addressed the organization level. Eight models addressed policy activities. A table listing each model and its classification in all three variables provides a tool to aid in model selection. Guidance and case studies were also developed to provide further assistance to researchers in selecting and utilizing a model throughout the research process.

Research Advances: To our knowledge, this is the first review of D&I models. We analyzed and categorized the D&I models to facilitate model selection by researchers. This work provides a much-needed tool that will enable researchers to better identify models to inform their D&I work and thus encourage future research to build on previous findings.

30. ACCELERATING THE TRANSFER OF RESEARCH TO PRACTICE: EFFECTIVE ADAPTATION OF AN EVIDENCE-BASED INTERVENTION TO PROMOTE COLORECTAL CANCER SCREENING

Primary Contact/Presenter:

Shin Ping Tu, MD, MPH
Associate Professor
University of Washington
Box 359780 Harborview Medical Center
325 Ninth Avenue
Seattle, WA 98104
Tel: 206-744-1835
shinping@uw.edu

Co-Authors:

Yip, M, PhD; Kuniyuki, A, MS; Huang, X, MD University of Washington; Yasui, Y, PhD University of Alberta; Taylor, V, MD, MPH, Fred Hutchinson Cancer Research Center; Bastani, R, PhD University of California Los Angeles

Abstract:

Background: Integral to the reduction of health disparities is the successful dissemination of effective interventions to minority populations. To accelerate the transfer of research findings to practice for underserved populations, we investigated the adaptation of an evidence-based intervention (EBI) that increased colorectal cancer (CRC) screening in one limited-English-proficient (LEP) population for another LEP group with overlapping cultural and health beliefs.

Methods: Guided by Diffusion of Innovation Theory, we adapted an EBI designed for LEP Chinese immigrants for LEP Vietnamese. Core elements of the adapted intervention consisted of: 1) small media translated into Vietnamese; 2) medical assistants distributing the small media instead of a health educator; and 3) presentations to the medical assistants.

A quasi-experimental study evaluated this adapted intervention by examining CRC screening adherence rates among eligible Vietnamese patients at the intervention and control clinics, before and after the 24-month intervention. We applied Generalized Estimating Equation modeling to the longitudinal outcome analyses.

Results: Our study consisted of two cross-sectional samples: N1=1,016 at baseline ($n_{intervention}$=604 and $n_{control}$=412), and N2=1,260 post-intervention ($n_{intervention}$=746 and $n_{control}$=514). CRC screening adherence rates increased significantly at the intervention clinic over time (adjusted: 25.6% to 33.5%; OR=1.46; 95% CI 1.18, 1.81), while there were no significant changes at the control clinic (adjusted: 26.2% to 26.2%; OR=1.00; 95% CI 0.80, 1.25).
Comparison between the odds ratios of CRC screening change over time at the two clinics showed significantly higher CRC screening adherence at the intervention clinic compared to the control site (p=0.016).

Discussion: Results from this study support theoretically guided adaptations of EBIs to accelerate the transfer of research to practice. Instead of developing new EBIs that focus on a new heath topic for each ethnic or language group, effective EBI adaptation has the potential to mitigate the health disparities of hard to reach populations in a timelier manner.

This research was funded by grant R01 CA 124397 from the National Cancer Institute

31. COGNITIVE PROCESSING THERAPY (CPT) DISSEMINATION IN TEXAS: OVERVIEW AND SURVEY DATA FROM PARTICIPATING CLINICIANS

Primary Contact/Presenter:

Amy Williams, PhD
Psychologist
Independent Practice
600 Parker Square, Suite 210
Flower Mound, TX 75028
Tel: 214-783-7369
dramywilliams@gmail.com

Co-Author:

Tara E. Galovski, PhD, University of Missouri-St. Louis

Abstract:

Funding support: The current initiative was funded by a 2005 Mental Health Transformation State Incentive Grant by the Substance Abuse and Mental Health Services Administration (SAMHSA) to the state of Texas.

Introduction/Research Goal: The SAMHSA grant spurred a Texas workgroup to identify the behavioral health needs of OIF/OEF veterans and their families, specifically the need for clinician training in empirically supported behavioral treatments (ESBTs) for PTSD. CPT is a 12-session, ESBT for PTSD. The CPT dissemination in the state of Texas mirrored the VA dissemination model which included two key components: (a) an in-person, experientially based workshop training, followed by (b) ongoing weekly participation in a small-group format over the course of 6 months with an assigned training consultant. The current survey was conducted to assess clinicians' ratings of utility of the workshop and dissemination model as well as to assess their implementation efforts.

Methods: In October, 2011, an electronic survey was sent to all clinicians who attended the workshop and had a current, valid e-mail. One follow-up request was made for participation. A total of 101 out of 193 clinicians responded to the survey, and 94 completed the survey (48.7% response/completion rate).

Findings and Summary: Results of the survey will be presented including both quantitative data and qualitative data from respondents. Overall, clinicians reported the workshop and follow-up consultation as helpful. However, they reported varying levels of implementation success. Successes and barriers to implementation of CPT in this statewide initiative will be discussed. The current dissemination and implementation has ecological validity. It is hoped that the findings will inform future dissemination/implementation efforts in state mental health systems where resources are limited.

32. INNOVATION ADOPTION OF EVIDENCE-BASED TREATMENTS AND PRACTICES: A REALIST REVIEW

Primary Contact/Presenter:

Jennifer Wisdom, PhD, MPH
Associate Professor
Columbia University
1051 Riverside Drive Box 100
New York, NY 10025
Tel: 212-342-4174
jpw2129@columbia.edu

Co-Authors:

Brian Chor, PhD; Sarah Horwitz, PhD; Kimberly Hoagwood, PhD

Abstract:

Problem: It is unclear how healthcare organizations decide to adopt innovations including evidence-based treatments and practices or how to increase openness to innovation adoption. To identify factors potentially related to innovation adoption we conducted a structured realist review to identify: (1) specific constructs associated with innovation adoption; (2) specific methods for measuring these constructs; and (3) effective interventions to change these constructs to increase innovation adoption.

Methods: We followed Pawson et al.'s (2005) realist review guidelines that yield high theoretical generalizability with a non-consequential trade-off for conventional "rigor" of a formulaic systematic review. Specifically, we: (1) Clarified the scope within the realm of innovation-adoption. Key theories were explored and articulated; (2) Searched for relevant evidence through iterative purposive sampling of background, thematic, and empirical search; (3) Appraised the quality of evidence to create a synthesis of literature that weighs in the different contributions of its components. (4) Extracted and assimilated key information according to its relevance; (5) Synthesized and refined theories by examining the integrity of literature, making sense of differences between rival literature, and how parallel literatures are applied to different settings; and (6) Made educated recommendations while considering the contextual nature of innovation-adoption in dissemination and implementation research.

Findings: We identified 32 specific constructs that are associated with innovation adoption which also have associated valid measurements. In addition, we found 15 interventions aimed at effecting change on these specific constructs. Most interventions addressed broad constructs and often multiple constructs. Although findings suggest change in specific constructs is possible, interventions are not sufficiently targeted to identify change in individual constructs.

These findings advance the field of dissemination and implementation research by identifying modifiable constructs that potentially could increase adoption of innovations.

This research was funded by the National Institutes of Health (P30MH090322).

33. IMPROVING PRACTICE: RX FOR CHANGE – AN INTERVENTION RESEARCH DATABASE FOR HEALTH CARE DECISION-MAKERS AND RESEARCHERS

Primary Contact:

Julia Worswick, BA, MA
Research Officer
Cochrane Effective Practice and Organisation of Care Review Group
The Ottawa Hospital – General Campus
501 Smyth Road, Room 1257
Ottawa, ON K1H 8L6
Tel: 613-798-5555
jworswi2@uottawa.ca

Presenter:

Jeremy M. Grimshaw, MBChB, PhD, FCAHS, Cochrane Effective Practice and Organisation of Care Review Group

Co-Authors:

Sophie Hill, BA (Hons), MA, PhD, Cochrane Consumer and Communication Review Group (CC&CRG);
Alain Mayhew, RPT, MSc, Cochrane Effective Practice and Organisation of Care Group (EPOC);
Genevieve Cowie, MB, BS, FRACGP, MPH, Grad Dip Healthcare Hist, CC&CRG; Rebecca Ryan, PhD, CC&CRG;
Dianne Lowe, BA, BSc, CC&CRG; Julia Worswick, BA (Hons), MA, EPOC; Michelle Fiander, MA, MLIS, EPOC;
S. Carolyn Wayne, MSc, EPOC; Katrina Sullivan, BSc (Hons), MSc, EPOC; Denis Belanger, BSc Phm, ACPR, (CADTH)

Abstract:

Background: There is abundant evidence available on the effects of strategies targeting professionals, healthcare systems, and consumers to improve practice behaviour, making it difficult for decision makers and others to reliably access and assess. Rx for Change (www.rxforchange.ca) is an internationally recognised intervention research database. This unique database provides one-stop access to summaries of key findings from quality assessed systematic reviews on interventions to improve evidence based prescribing practices and consumers use of medicines.

Objectives: To describe Rx for Change and to disseminate the evidence from the database to inform on the effectiveness of interventions to change professional prescribing practice behaviour and medicines use by consumers.

Methods: We identify, analyse, summarise and synthesise findings from systematic reviews of moderate to high methodological quality on a regular basis using standardised methods as appropriate. This data is organised and presented on the Rx for Change web-site using a multi-layer format that includes: an expandable list of intervention categories; summaries of the evidence found for each intervention; a list of all the systematic reviews that have addressed the intervention topic with corresponding quality scores; a description and summary of the results and conclusions from each individual review; and links to reviews and their trials.

Results: The database contains: summaries of key findings for 275 systematic reviews; and summaries and statements of effectiveness for 39 interventions that these reviews addressed. Examples of effective interventions include those to minimise risks or harms for improving consumers' use of medicines; the distribution of educational materials and use of educational meetings to improve professional behaviour change (including prescribing). Gaps are evident in 11 intervention categories.

Conclusion: Rx for Change is a publicly available resource that translates the results of systematic reviews into formats useful for policymakers. The database provides users with reliable conclusions based on the evidence found in good quality systematic reviews.

Primary sources of funding: The Canadian Agency for Drugs and Technologies in Health (CADTH) with additional support from the Australian National Prescribing Service Ltd. (NPS), Knowledge Translation Canada, and the Canadian Institutes of Health Research (CIHR). Jeremy M. Grimshaw holds a Canada Research Chair in Health Knowledge Transfer and Uptake.

Institutional support: University of Ottawa, Ottawa. Canada; La Trobe University, Melbourne, Australia; Ottawa Hospital Research Institute, Ottawa, Canada

34. IMPLEMENTATION OF A COMPREHENSIVE BLOOD CONSERVATION PROGRAM

Primary Contact/Presenter:

Jennifer York, MD
Clinical Fellow
Washington University School of Medicine
600 S. Euclid Avenue
Campus Box 8116
St. Louis, MO 63110
Tel: 314-286-1246
york_j@kids.wustl.edu

Co-Authors:

Julie Hoerr, BSN, MSN, St. Louis Children's Hospital; Jennifer Jaffe, MPH, CCRP; Manuel Silva-Carmona, MD; Allan Doctor, MD; Philip C. Spinella, MD, FCCM, Washington University School of Medicine; Enola Proctor, PhD, Washington University

Abstract:

Introduction: Current practice leads to excess blood removal (for laboratory testing) from Pediatric Intensive Care Unit (PICU) patients leading to anemia, longer stays, and additional days of mechanical ventilation. We designed and tested a comprehensive implementation program for evidence-based blood conservation techniques to decrease wastage, anemia, and transfusions.

Methods: The Comprehensive Blood Conservation Implementation Program was adapted from the Comprehensive Unit-based Safety Program, which combines implementation strategies proven effective in intensive care settings and is designed to improve the safety climate by empowering staff to assume responsibility for safety. Program phases include: Preparation (blood conservation survey and staff attitude assessment); Implementation (staff education and team building); and Data Analysis. Implementation effectiveness will be evaluated on staff acceptability and adoption outcomes.

Findings: Prior to implementation, blood draw practice was assessed to identify key factors to address in program implementation. On average, 3.3 ± 2.5 ml/kg blood was removed, with 89% of samples overdrawn. Red blood cells were transfused to 32% of this cohort, in response to a hemoglobin drop of 3.9 ±1.9 g/dL. These data identified addressable factors that influence the volume overdrawn (access site and pattern of test ordering), which were incorporated into the Implementation Program. Additionally, the data demonstrated frequent blood overdrawing, suggesting that a gap exists between the intention to conserve blood and practice.

D&I: This study is innovative in application of implementation strategies to improve blood conservation in critically ill children. Effectiveness of implementation strategies to improve blood conservation has not been evaluated in the PICU. A comprehensive implementation program that targets healthcare provider behavior is novel, representing a critical crossroad generalizable to other safety initiatives.

Grant UL1 RR024992, National Center for Research Resources

Notes

Notes

Notes

Notes

Notes

Notes

Notes

Notes

Notes

Notes

Notes


DEPARTMENT OF HEALTH & HUMAN SERVICES • USA

NATIONAL INSTITUTES OF HEALTH

OBSSR
OFFICE OF BEHAVIORAL AND SOCIAL SCIENCES RESEARCH